

Major Research Paper

Supporting social-cognitive development in the elementary years:
The role of executive function and self-regulation

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Abstract

Every day we make decisions that have repercussions. Sometimes the effects are immediate and intended; other times the effects might be unintended or might not be apparent for years. As parents or educators, part of our role is to support the development of children's decision-making skills, helping them to develop patterns of adaptive decision-making that will serve them well in their current lives and into the future. Part of successful decision-making involves self-control, a system served by the brain's executive functions (EF). This involves the ability to put aside immediate reactions and base decisions on a variety of important considerations. Social-cognitive development, the ongoing improvement of the ability to get along with others and to understand others' emotions, expressions, motivations, and intents, relies, to a large degree, on the same EF systems. The current paper explores the interaction of these two factors (the role of EF in social-cognitive development), explores the research to determine the most effective approaches to improving both factors, and develops a handbook providing activities for educators to use while supporting the growth of both EF and social-cognitive skills. Results of a needs assessment reveal that the majority (59%) of educators surveyed had never used a social skills improvement program in their classrooms, while a full 95% believed that social skills are important or very important for a student's academic success.

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CHAPTER ONE: INTRODUCTION

There is a growing awareness in education that social skills play a large role in a student's academic success. It is likely that component factors contribute to both social and academic prowess, but it is also likely that social skills have a direct influence on academic life; regardless of the route of influence, improving social skills and their component factors should contribute to both social and academic success in students.

One of the component factors in social and academic skills is the neurological processes known as the executive functions (EF). EF is known by many names, including cognitive function and cognitive control. EF is thought of as the control centre of the brain, but it also forms the infrastructure between other cognitive systems (Denckla, 2007).

This project will explore the ways in which elementary school teachers can use current EF research to improve elementary students' social skills and both directly (through improved EF) and indirectly (through improved social skills) support ongoing academic achievement. This project will include a handbook of activities to support a classroom-based intervention to develop EF and social skills for elementary children.

Background of the Problem and Statement of the Problem Situation

The current approach in many school boards, particularly regarding children with learning disabilities, is to provide students who have an identified learning disability (LD) and a resultant individual education plan (IEP) with academic accommodations to support their education. Accommodation typically includes approaches such as allowing the student to work in a separate room, providing scribing, and technological support as

necessary. While these supports are very important to the child's ongoing intellectual and academic growth, they do not allow for remediation of the underlying issue, nor do they address the non-academic areas that may also be affected by the LD, including the child's social skills. Children with LDs that typically involve social and emotional challenges, like sensory processing disorder (SPD), attention deficit hyperactivity disorder (ADHD), disorder of written expression (DWE) and autism spectrum disorders (ASD), can be left making academic progress, but suffering socially and emotionally and therefore not progressing as well as they could be.

Purpose of the Study

This project will develop an approach and a handbook of activities to apply the EF research to the explicit teaching of social skills. The project attempts to both remediate some of the underlying EF issues as well as support children in developing their peer relationships and their relationships with their teacher(s). Improving peer and teacher relationships should also support the children's academic achievement.

This project will take into account a theoretical framework based on Bandura (1977) and also based on principles of neuroplasticity. The project aims to answer the questions: How can educators support academic achievement through social skill development in elementary school children? What is the role of executive function and self-regulation in social skills development? How can educators use current EF research to improve social skills and academic achievement? How is EF related to social skills? What are the common elements of successful social skills programs and EF improvement programs?

Theoretical Framework

Several educational theories support the possibility of learning social skills and improving EF in the classroom. Social cognitive theory provides a model of triarchic reciprocal causality based on Bandura's earlier social learning theories (Woolfolk, Winne & Perry, 2012). This model captures the dynamic interrelationship between social and environmental influences, personal influences and behavioural influences in a learning setting. This system is represented in Figure 1. As this model suggests, if we are able to influence the environment then the environment will, in turn, influence thinking, skills and behaviour.

The theory of self-regulated learning suggests that students observe their own behaviour and evaluate it according to their own standards (Bandura, 1977). In this model, the child needs to hold both the memory of their action and the behavioural standard in their mind for comparison. This behavioural standard may be one that they have learned from significant adults in their lives or one they have observed in their environment. Perhaps, without explicitly-stated standards from appropriate adults, there is a void that will be filled by other (perhaps less desirable) examples in the child's environment such as media (internet, television, movies or video games) or by peers. This mental exercise of comparison requires the part of EF referred to as working memory.

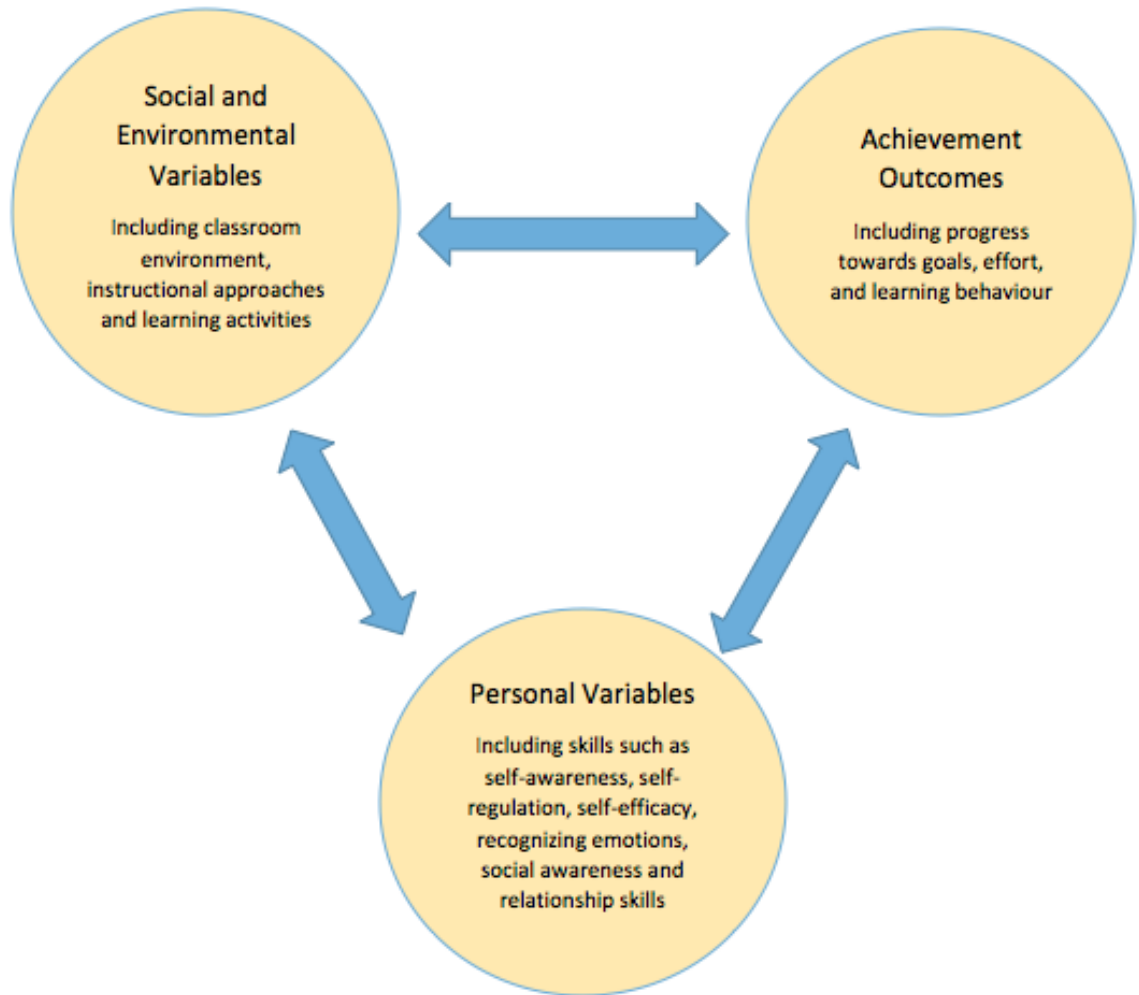


Figure 1. Extended model of triarchic reciprocal causality (based on Schunk, 1999, and Collaborative for Academic, Social, Emotional Learning, 2014).

Taking advantage of the social nature of the classroom provides opportunities for active and interactive learning. Social constructivist theory suggests that students should be able to learn the social skills they require in the classroom context. Provided with appropriate instruction and experiences, the children and their teacher can draw on the culture of their classroom, as well as the culture at large, to define and refine their skills (Vygotsky, 1978). According to Vygotsky, students will move from teacher-controlled behaviour to self-controlled behaviour through the use of private speech to self-regulate their behaviour. Students will then learn to think about their own thinking and develop metacognitive abilities (Slavin, 2003).

Cultural modeling can be used to think about the difference between ‘spontaneous concepts’ learned informally via everyday activities and ‘scientific concepts’ or official/explicit school subjects (Vygotsky, 1987). By maintaining a culture conducive to social emotional learning as well as explicitly teaching the same content, educators can ensure that students have the best chance of gaining and maintaining new social knowledge and skills.

In addition, the principles of neuroplasticity suggest that through repeated practice (behaviour), neural pathways can be altered. This ability to change suggests that EF can be improved with appropriate practice (Diamond, 2012). Diamond (2012) outlines this process: interventions directly and indirectly build EF, stronger EF in turn results in improved academic outcomes, and improved academic outcomes reinforces the EF, creating a positive feedback cycle. This suggestion is incorporated into Bandura’s model in Figure 2.

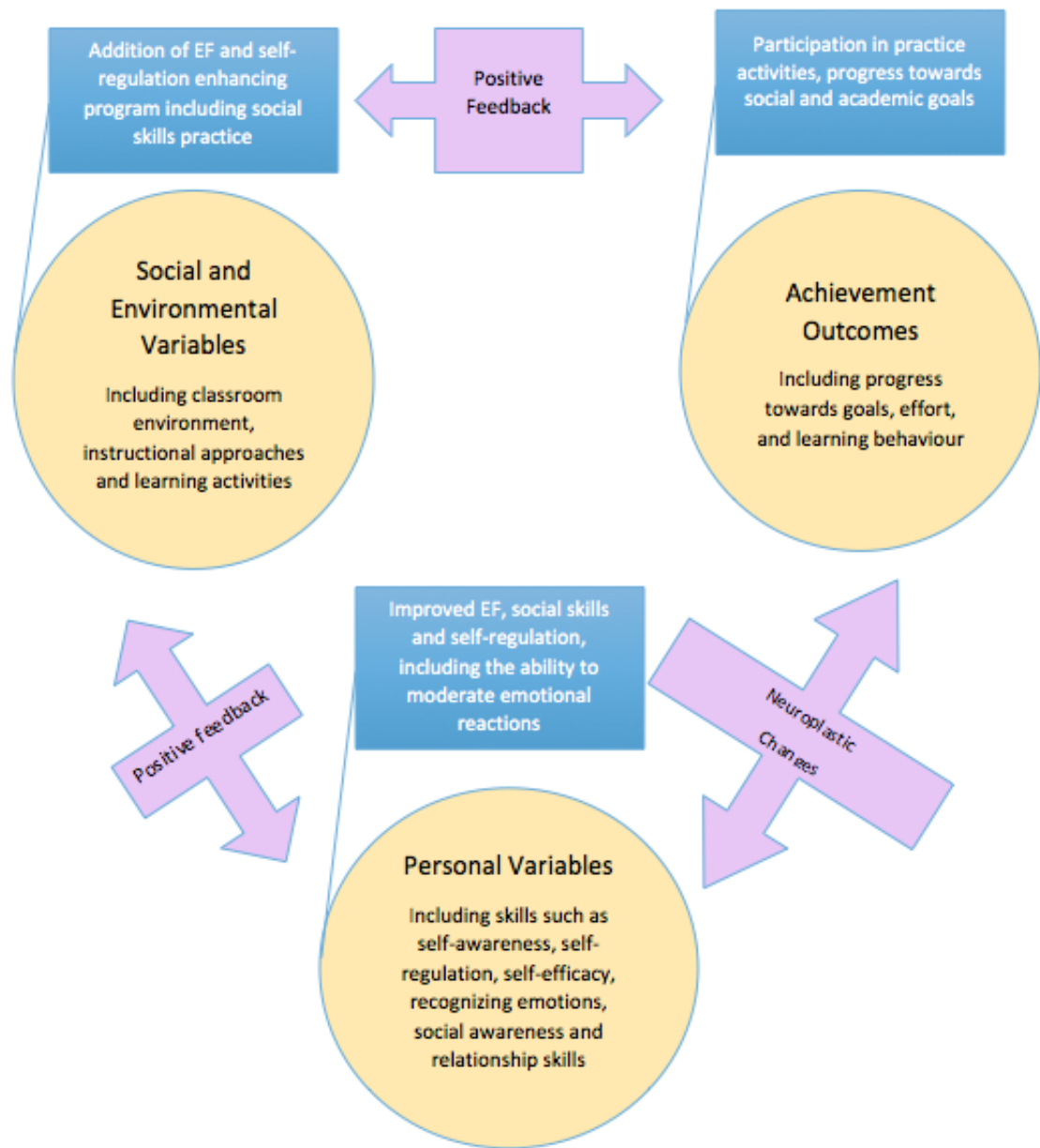


Figure 2. Triarchic Reciprocal Causality and Neuroplasticity (modified from Schunck, 1999, Diamond, 2012, and Collaborative for Academic, Social, Emotional Learning, 2014).

Importance of the Study

Social and emotional skills play a significant role in academic success (Malecki & Elliot, 2002; Wentzel, 1993). Through better understanding the role of EF in social skills, we can improve our understanding of the challenges children with LD face in social situations, including in the classroom with peers and teachers. As children are better able to regulate their emotions and understand social situations, they will have more success at school in situations like interacting with their peers and understanding their teachers' non-verbal cues. When teachers can appreciate the challenges students may be facing as they try to navigate what may seem like a social minefield, teachers may be more empathetic to their students' situations and use the provided activities to scaffold the students' social learning and develop a deeper understanding of their social and academic challenges. This project may therefore benefit both teachers and students.

Scope and Limitations

The results of this project will need to be field-tested to confirm their usefulness. The results should be relevant for all students, but particularly for elementary students who experience learning disabilities. All elementary students could benefit from explicit social skills training and executive function training. Research shows that the students with the most EF challenges benefit the most from EF training, a fact which suggests that EF training is a useful tool for levelling the academic field for students with EF challenges. However, the generalizability of the results will depend upon the number of participants and the scope of their experiences and locales.

CHAPTER TWO: LITERATURE REVIEW

For the purpose of this paper, the term *social skills* will be used to refer to an array of abilities including self-management, self-awareness, social awareness, social decision-making and relationship skills as suggested by research into social and emotional core competencies (Collaborative for Academic, Social and Emotional Learning, 2014). Evidence suggests that these competencies, when addressed within the framework of the elements of successful intervention programs, form essential skills for improving students' relationships with themselves and others (e.g. Demir, Jaafar, Bilyk & Ariff, 2012).

The Importance of Social Skills

What is it that allows students to get along with their teachers and with other students? Children come into the world with their own personalities and natural tendencies. Even infants differ widely in their sociability; some seem to be able to engage adults from birth with eye contact and smiles, while others seem more discontented and irascible. Similarly, the ability to implicitly learn social skills and pragmatics is straightforward for some children yet almost impossible for others. The root causes for these differences are likely based in both nature and nurture. For example, the influence of genetics (i.e. nature) includes the biologically-based tendency towards building attachments, intimacy, and trust due to the activation of neural reward systems featuring oxytocin and vasopressin (Archontaki, Lewis, & Bates, 2013). There is also the influence of nurture emerging from a child's early environment, including the

degree to which parents and caregivers are responsive, providing positive social experiences like meeting eye contact with smiles (Landry, Smith & Swank, 2006).

Fortunately social skills are not just learned implicitly; they can also be learned from explicit instruction. Much like students who are bilingual learn to speak each language according to the appropriate circumstances, children who speak a variety of dialects in the community can learn to read and write in a second ‘standard’ dialect for school. Perhaps children who may not naturally possess social skills can learn a second behaviour set for the academic setting, with benefits that can extend beyond the classroom.

What do we need to know before we can embark on the explicit teaching of social skills? We need to look at answers to questions such as: When is the best time in a child’s life for intervention? What are the roles of executive function and self-regulation in social skills? What are the components of a successful intervention program? What are the component skills an individual needs for improved social cognitive development?

While social and emotional growth are valuable in their own right, can incorporating explicit training in the classroom yield benefits for students? There certainly seems to be a benefit to children and adults to attaining social competence. More proficient mastery of social skills (such as self-regulation of emotions, understanding social norms, and turn-taking) are associated with more satisfactory friendship experiences and greater life satisfaction across ages and cultures (Demir, Jaafar, Bilyk & Arift, 2012; Meier, DiPerna, & Oster, 2006). As well, social skills can be used as a predictor of academic achievement (Malecki & Elliot, 2002; Wentzel, 1993).

These advantages may be due to underlying skills that support both academic and social competence such as EF and self-control.

When students have a more thorough mastery of self-regulation and social skills, teachers have fewer classroom management concerns and are consequently able to utilize more time for instructional activities. Classroom management is essential for student achievement (Wong & Wong, 2014). Not only is it essential for achievement, when a teacher has difficulties with classroom management, instructional time is lost, and the teacher may experience elevated stress (Sayeski & Brown, 2011). This stress is likely to be detrimental to the teacher-student relationship. Children with behavioural problems are more likely to have increased conflict with their teachers and are less likely to have a close relationship with them (Jerome, Hamre & Pianta, 2009). This suggests that by improving students' social skills, we will improve their relationships with their teachers as well as with their peers.

Early Childhood as an Optimal Time for Intervention

Early childhood is a foundational time in a child's development. Physical, emotional, and cognitive development at each stage of childhood form the basis for future stages of development. Experiences in these early years, therefore, are fundamental to the rest of a child's life. The experiences a child has in early childhood set the stage for his or her attitude and understanding in school and beyond. Positive early school experiences with peers and teachers, supported by social skill development, will encourage the development of positive attitudes towards school which may last a lifetime.

As children are starting school and beginning to interact more frequently with

their peers, early childhood has been proven to be a developmentally opportune time for explicit social skills education (January, Casey & Paulson, 2011; Ramey & Ramey, 1998). Children at this age generally have enough language skills and attention to engage with the lessons and are beginning their journeys as social beings outside of their families, forging their identities, learning to navigate friendships, and learning to manage conflicts with peers.

A closer look at the development of language, particularly the development of referential communication skills, provides one example of the way in which early childhood and the early elementary school years are an opportune time for social skills intervention. Referential communication, the ability to consider one's partner's needs while communicating, develops a great deal between the beginning and the end of the elementary school years (Sonnenschein, 1988). By supporting the growth of social skills at this developmental stage, a positive synergy is created between the ability to consider others' needs, the knowledge of how to understand and interpret those needs, and the knowledge of the communication pragmatics to support the forging and maintenance of positive relationships peers and with caring adults.

Developmental social cognitive neuroscience also identifies early childhood as an optimal time for EF and social skills intervention. One measure of social cognitive development, theory of mind (ToM), refers to the ability to attribute separate mental states and beliefs to oneself and others, and to understand that others' behaviour is related to the others' own thoughts and beliefs (Frith & Frith, 1999; Premack & Woodruff, 1978). ToM is known as a necessary precursor to understanding others' social behaviours and as a significant contributor to successful social interactions, including

communication (Hamilton, 2009). For most children, ToM develops between the ages of three and four years, and is fully in place by the age of five years (Pelphrey & Perlman, 2009). Beginning social skills and EF skills interventions at this stage, therefore, supports the development of positive, functional habits at a time when children are developmentally ready and, ideally, prior to the development of less functional habits. EF skills should be addressed as early as possible as early problems with EF predict problems years later. Thus early intervention is optimal, as EF problems often grow over time (Diamond, 2012).

The Role of Executive Function in Social Skills

EF is a term used to conceptualize a group of cognitive processes that coordinate and, in some ways, oversee brain functions. Various definitions exist but EF is commonly thought to include working memory, inhibition and cognitive flexibility (Miyake et al., 2000). These three elements work both independently and in a coordinated fashion to set goals, maintain focus on those goals, and consider others' viewpoints.

EF appears to play an important role in developmental outcomes of childhood. Studies reveal significant relationships between EF and school readiness, the ability to learn, and the ability to get along with peers and teachers (Zelazo, 2015). It is hypothesized that the ability to reflect on information before taking action, known as *iterative reprocessing*, interacts with EF in a cycle such that self-regulation of attention and behaviour strengthens the ability to reflect, which in turn strengthens self-regulation. Both EF and reflection are strengthened with practice and both skills are necessary for learning and problem solving (Zelazo, 2015).

What is the role of EF in social skills? Developing social skills requires several abilities working in conjunction: recognizing social cues, understanding others' emotions and meaning, having a repertoire of responses, deciding which response is appropriate given one's own and others' intentions, and lastly, acting on this decision (Crick & Dodge, 1994). These skills need to be put to use in five types of peer interactions (as well as in additional situations with family and responsible adults like teachers and coaches). These five types of interactions have been captured in Buhrmester, Furman, Wittenberg and Reis' (1988) domains of interpersonal competence in peer relationships. They include initiation (skills to begin interactions like beginning a conversation or suggesting an activity to do together), negative assertion (saying "no" to an activity that is not enjoyed or letting someone know when they have been unkind), disclosure (sharing experiences and emotions), emotional support (showing empathy and providing advice), and conflict management (understanding others' points of view or admitting errors).

Developing these skills and using them appropriately and competently requires all three aspects of EF. The child must inhibit purely emotional "knee-jerk" reactions, use working memory to hold their own goals (like maintaining friendships) and their friends' goals in mind, and effectively shift attention to finding an appropriate response (Denham et al., 2014). As well, cognitive flexibility allows the child to try and see a situation from a friend's viewpoint, enhancing empathy and emotional understanding (Martins, Osório, Verissimo, & Martins, 2016).

In fact, the development of ToM and EF are closely linked. There is a correlation between the skills presented by ToM and those involved in EF, but the nature of the relationship is still being explored (Bradford, Jentzsh & Gomez, 2015; Carlson & Moses,

2001). It may be that the development of ToM (metarepresentational skills) are necessary before children can remove themselves enough from a situation to inhibit their impulsive actions (displaying EF); conversely, it may be that children require the ability to control their thoughts and behaviours, and mentally step away from the current moment (using EF) prior to being able to conceive of others having separate thoughts and feelings (ToM) (Carlson & Moses, 2001). Recent research suggests, however, that it may be more likely that EF is necessary for the development of ToM (Carlson, Claxton, & Moses, 2015). If this is the case, EF skills are a necessary precursor of successful social skill development.

Components of Successful Executive Function Programs

Successful EF programs rely on the principle of *neuroplasticity* or the fact that behaviour, particularly repeated behaviour, can modify the brain's neural networks. It must also be remembered, however, that novelty is very motivating to young children. Therefore, the repetition must be balanced with change. In a review of programs aimed at improving EF, Diamond (2012) found that because training in one aspect of EF does not necessarily transfer to other aspects of EF (for example, working memory training may improve other working memory-related tasks but not be related to improvements in inhibition), a program that addresses a wider range of EF components is likely to have a wider effect.

Diamond (2012) also notes that a progressive curriculum that increases challenges as children improve both maintains interest and allows for ongoing improvement of skills. This is in line with motivation literature as well; ideal activities are consistently in the *zone of proximal development*, the ever-changing ideal area where activities are

challenging enough to be interesting, but achievable enough to foster the feeling of possible success (Woolfolk, Winne, & Perry, 2012). As well, the most gains in EF are shown in the programs that are the most demanding, pushing the limits of children's abilities. Also aligned with research on neuroplasticity and excellence, repetition is a key feature of successful programs, ideally presenting a challenging "spiral" progression with increasingly challenging tasks that balance novelty and repetition. Diamond also notes that aspects of EF should be an identified component of the activities noting that martial arts without the character development and self-control elements may increase--rather than decrease--aggression.

Components of Successful Social Skills Programs

Comparing programs can be like comparing metaphorical apples and oranges. Because so many programs vary widely, it is efficient to use existing meta-analyses. Two kinds of qualities are of interest: content elements that address the material which is introduced to the children, and pedagogical elements that address the ways in which the material is presented.

Berkowitz and Bier (2007) identified three content elements and five common pedagogical strategies in successful programs. The content elements were social-emotional curricula (social skills and awareness), self-control and emotion management, and a meta-cognitive element (such as decision-making). The most common pedagogical strategies were professional development for the teachers, both interactive and direct teaching strategies, the inclusion of a wider social influence such as a family or community participation, and some elements of modelling or mentoring.

Durlak, Weissberg, Dymnicki, Taylor and Schellinger (2011) concluded that it was important that programs were well conducted (carried out as planned) to be effective. This reinforces the importance of classroom management as identified earlier in this paper. Durlak et al. also identified four important components for effective programs for which they chose the acronym SAFE – sequenced (activities are connected and coordinated to build on skills), active (including non-passive activities), focussed (including elements directly related to developing the target personal or social skills), and explicit (not just targeting positive development in general, but specific social-emotional learning skills).

January et al. (2011) found that interventions with preschoolers and kindergarteners were more effective than interventions in later grades. However, January et al. also indicated a second ‘sensitive’ period in early adolescence. This sensitive period occurs when social relationships take on more facets (such as dating and more mature interactions), requiring that new social skills must be navigated.

Social skills retain their significance in adolescence. As mentioned earlier with younger children (Malecki & Elliot, 2002; Wentzel, 1993), Oberle, Schonert-Reichl, Hertzman, and Zumbo (2014) found that teachers’ perceptions of students’ social-emotional competence was predictive of their academic performance. Social skills that are seen particularly important for adolescents’ friendships and popularity with their peers are the ability to manage their anger constructively, prosocial actions (lack of antisocial behaviour) and pragmatic skills such as knowing how to initiate interactions with others and how to take turns (Wolters, Knoors, Cillessen & Verhoeven, 2014; Von Salisch, Zeman, Luepschen & Kanevski, 2014).

The existence of two ‘sensitive’ periods suggests that a two-pronged approach might be effective with interventions in early childhood that are repeated and augmented in early adolescence. January et al. (2011) also found that longer programs are more effective – this suggests that perhaps a moderately intensive multi-week program may be optimal. Perhaps a program with two sessions per week (or four per ten day cycle) lasting ten weeks or five cycles would be frequent enough for students to remember and build on skills while being of a long enough duration to give students a chance to practice the lessons they have learned. Finally, they found that experiential lessons were most effective.

Sklad, Diekstra, deRitter, Ben and Gravestijn (2012) reiterated Durlak et al.’s (2011) findings and added that programs run by classroom teachers and by professionals from outside of the classroom do not differ significantly in effectiveness. Ideally, if the program is run according to plan, anyone could be an effective leader. However, logically, if the classroom teacher has good classroom management skills, his or her effectiveness would be greater than someone from outside of the classroom who may not have the same classroom management skills -- while this relationship may be reversed if the professional from outside of the classroom has better classroom management techniques.

Summary of Effective EF and Social Skills Program Components

When put together, the meta-analyses of EF and social skills programs suggest that effective programs require content that includes sequenced lessons on

- specific necessary social skills and EF targets;

- elements of working memory, self-control (inhibition and emotion management) and cognitive flexibility;
- meta-cognition including decision-making.

Overall, effective programs have pedagogical approaches that include

- a variety of instructional techniques that require active participation (novelty can optimize engagement);
- challenging activities in the zone of proximal development;
- modeling or mentoring;
- repeated opportunities to actively practice new skills;
- adequate support for teachers via the program itself and/or in-service training;
- the inclusion of a wider social sphere (school, family or community).

It is therefore these components that will be addressed in the handbook that follows.

CHAPTER THREE: METHODOLOGY

The goal of this project was to develop a new approach to social skills interventions for elementary school children that encompassed recent research on the importance of EF in social skill development and academic success. There is a particular need to support the social skills development of children with learning disabilities that affect their EF skills, and therefore affect their social skills as well. A literature review has captured the components of successful programs according to existing research while a survey design formed a needs assessment and addressed the additional questions regarding teacher views on social skills and social skills programs.

Research Design

The survey design was appropriate to answer the questions regarding the social skills that teachers believe to be most important in the classroom. Additional questions addressed as part of the needs assessment included: Do teachers have access to, and awareness of, existing social skills programs, and do they feel they are effective? Do teachers feel that the social skills of students are important? What are the most important factors for teachers in choosing an in-class intervention program?

A survey design was appropriate as the research intends to capture the opinions of the sample and generalize to a wider population of Canadian elementary teachers (Creswell, 2014). The design was also appropriate as it is economical and should allow for timely responses. It was cross-sectional, collecting data at a single point in time but allowed for a follow-up by volunteers who wished to evaluate the resulting handbook.

Participant Selection

The population of interest was current and former elementary school teachers in Canada. In Ontario alone there are 73,032 employed full-time elementary school teachers (Ontario Ministry of Education, 2014), with a total elementary and secondary school educator population of just over 400,000, of whom 74.7% are between the ages of 30 and 54 years (Statistics Canada, 2015). Among elementary school and kindergarten teachers, 84% are female (Statistics Canada, 2014). Of this large population, a moderate sample of approximately 30 respondents was anticipated; however, an online survey methodology is flexible enough to handle a larger or smaller sample size.

An online survey using SurveyMonkey was conducted and was accessible to teachers via social media and email. To facilitate access to this population, participants were invited via a snowball technique with teachers able to invite their friends and colleagues. A link to the online survey was posted in Facebook inviting current and former elementary teachers to follow the link to participate in the survey. Participants were then invited to share the link on their own Facebook or other social media pages. Email invitations were sent to known target group members who are not involved with other social media. Participants were informed of the nature of the survey, the intentions of the research, and their rights as participants on the invitation to participate and on the first page of the survey. They participants agreed that they understood and agreed to participate prior to being able to complete the survey. Participants were welcomed from across Canada, and included current and former elementary school teachers.

Data Collection

The survey was available for a one-month period. Survey questions were based on the specific questions of interest in the needs assessment. The importance of skills question (question 4) is informed in part by the specific skills teachers considered critical for classroom success in Meier, DePerna and Oster's 2006 study.

Questions included:

Survey Questions:

Question 1

Please tell me about a time when a child in your class experienced a social problem such as exclusion by classmates from a desired social activity (such as other students not wanting to sit with the child at lunch or work with the child on a project), teasing by a classmate, or conflict over how a shared activity should proceed (being 'bossy' or not being willing to compromise with his or her classmates).

Question 2a

Several programs exist to support social skills and may address skills like the development of empathy or may help children learn to express emotions or read facial expressions.

Do you have access to a similar social skills program for your class? Examples of social skills programs include *Roots of Empathy*, *Peacemakers* or *EQUIP*.

☐ Yes ☐ No, not that I'm aware of

Question 2b

If yes, have you ever used a social skills program for your class and did you feel that it was effective (that the program resulted in a noticeable difference in the students' behaviour)?

☐ Yes I have used the program called _____ and I felt that it **was** effective

☐ Yes I have used the program called _____ but it was **not** effective

☐ No I have never used one

Question 3

How important do you feel that a child's social skills are for his or her academic success?

___ Not important - I feel that as long as the child has intelligence he or she will do fine in school

___ Sometimes important - I feel that the ability to get along with others can sometimes help a child do well in school

___ Important – I feel that without the ability to get along with others, a child will have a hard time doing well in school

___ Very important – I feel that a child has to be able to get along with others in order to do well in school

Question 4

What do you think are the most important skills for a CHILD to possess in order to get along with their classmates (please mark with a C)? With their teacher (please mark with a T)? or for both (please mark with a B)?

___ Flexibility (the ability to 'go with the flow', try new things, deal with change)

___ Agreeable nature (a 'sunny' disposition, gets along with most people)

___ Academic intelligence (understands literacy and mathematical concepts easily)

___ Politeness (says 'please' and 'thank you', helps others)

___ Knowing how to speak his/her mind (will speak in class, will stand up for him or herself and for friends)

___ Patience (can listen while others speak, is willing to wait for a turn)

___ Self Control (can sit for appropriate periods of time, can manage frustrations)

___ Self-efficacy (has the belief that he/she can accomplish what they are attempting to do)

___ Good attitude (is willing to try activities, will try to get along with others)

___ Self-confidence (comfortable trying activities without close adult supervision)

___ Other (please specify)

Question 5

Please indicate the emotional skills you believe TEACHERS should demonstrate in order to successfully support student social and emotional growth:

___ Patience (e.g. willingness to bear with annoyance without losing one's temper)

- ___ Self Control (the ability to manage one's emotions and behaviour)
- ___ Flexibility (the ability to switch gears as necessary or to 'go with the flow')
- ___ Understanding social cues (the ability to read facial expressions and body language)
- ___ Empathy (the ability to understand, label and sympathize with emotions that others are feeling)
- ___ Other _____

Question 6

Please check the most important considerations for you when choosing and implementing a program for your class:

- ___ Duration (how long the program lasts, for example if it lasts for six weeks or six months)
- ___ Ease of preparation (whether everything is provided and ready to use)
- ___ Strong theoretical basis (if the program is based on an educational or developmental theory such as those of Piaget or Vygotsky)
- ___ Time required per day/week (for example, whether the program is one hour per week or five hours per week)
- ___ Proven effectiveness (whether the program has been tested and shown to be successful with other classes)
- ___ Other (please specify) _____

If you wish to receive a copy of the program developed as a result of this survey, you may choose to provide an email on the next page or a link to the finished program will be posted in the same manner that you learned of this survey. If you choose to provide your email, your contact information will not be associated with your survey results and the information will be destroyed once the email has been sent. Please also indicate whether you would be willing to participate further in the current research by providing a review of the program once it has been sent to you. If you indicate that you would be willing, your contact information will be kept separately from your survey information and only used in order to send you the program and communicate further regarding your opinion of the survey.

Thank you ☺

Data Analysis

Following the survey, the results were analysed to understand whether teachers were aware of social skills programs in their area and whether many social skills programs are currently in use. The survey also revealed both the skills the participants felt were necessary for their students and the attributes that would encourage participants to choose one program over another. The survey results were tabulated and analysed with basic descriptive statistical techniques, primarily indicating the percent of respondents agreeing with each particular response. The percent of respondents in agreement was used to interpret the educators awareness of the availability of social skills program, whether social skills programs are in widespread use, and how important educators feel that social skills are to children's academic success (questions 1, 2, and 3). The number and percent of educators in agreement with the statements provided information regarding the skills educators believe are important for children and teachers (questions 4 and 5). The weighted average was used to indicate the program elements educators value most in selecting programs for their classes (question 6).

Following the survey analysis, the program was developed according to the needs identified by the survey and the qualities of successful programs identified in the literature review.

A draft of the program was reviewed by several of the participants who identified their willingness to participate further in the research. If participants wished, they would receive a copy of the final program with or without further participation in the research.

Ethical Considerations

A Brock University Research Ethics Board (REB) application was submitted following the acceptance of this proposal. This ensured that the project met with Brock University policies regarding human ethics. The author also successfully completed the Tri-Council Policy Statement course on research ethics (CORE) tutorial.

Every effort was made to ensure that participants' responses remained completely confidential and, if they chose to volunteer for further review of the handbook, or to have a copy of the handbook sent to them at the end of the project, that their personal information was kept strictly confidential, that it was kept separately from their survey responses, and that it will be destroyed at the end of the project.

Participants were at little to no risk as a result of their participation in the survey. Questions asked for opinions and knowledge only, participants were free to request any additional information they desired and were free to withdraw their participation at any time. Participants were made aware of their rights before participating in the survey. Approval was sought and obtained from the Brock University Research Ethics Review Board prior to the survey being available to participants (file number 14-228).

CHAPTER FOUR: SURVEY RESULTS

The purpose of the survey was to determine the need for a social skills program, the extent to which educators were aware of the availability of social skills programs, the social skills of students and teachers that educators believe to be valuable for academic success, and the program elements educators consider when choosing a program for their classrooms. The questions identified for inclusion in the survey were imported to Survey Monkey and a response format was developed with the online tools available.

In August 2015, the online survey was posted in Survey Monkey. The majority of responses were received between August 10th and 24th. Links to the survey were posted on social media, including links posted to several teacher organizations, including a University of Regina Bachelor of Education alumni group, and a Saskatchewan teachers' Facebook group, as these are groups of which the author is a member. Participants were also invited to repost the survey to their own teacher groups. A total of 44 people responded to the survey.

Survey Results

Question 1

Several social skills programs exist for elementary school classes. These programs may address skills like the development of empathy or may help children learn to express emotions or read facial expressions. Do you have access to a social skills program for your class? Examples of social skills programs include Roots of Empathy, Peacemakers, and EQUIP.

Participants who answered: 43

Participants who did not answer: 1

Results are presented in Table 1.

Table 1

Participant Responses to Question 1

Response	Number of Responses	Percent
Yes	21	48.8%
No	22	51.2%

Question 2

Have you ever used a social skills program with your class?

Number of participants who answered: 44

Number of participants who did not answer: 0

Participant responses are presented in Table 2 and Figure 3.

Question 3

How important do you feel that a child's social skills are for his or her academic success?

Number of participants who answered: 43

Number of participants who did not answer: 1

Participant responses are presented in Table 3 and Figure 4.

Question 4

What do you think are the most important skills for a CHILD to possess in order to get along with his or her classmates? With his or her teacher?

Number of participants who answered: 41

Number of participants who did not answer: 3

Participant responses are presented in Table 4.

Question 5

Please indicate the emotional skills you believe TEACHERS should demonstrate in order to successfully support student social and emotional growth:

Number of participants who answered: 41

Number of participants who did not answer: 3

Participant responses are presented in Table 5.

Question 6

Please rank the most important considerations for you when choosing and implementing a program for your class.

Number of participants who answered: 40

Number of participants who did not answer: 4

Participant responses are presented in Table 6.

Table 2

Participant Responses to Question 2

Response	Number of Responses	Percent
Yes, I have used a social skills program and I felt that it WAS effective	16	36.4%
Yes, I have used a social skills program BUT it was NOT effective	2	4.5%
No, I have never used a social skills program with my class	26	59.1%

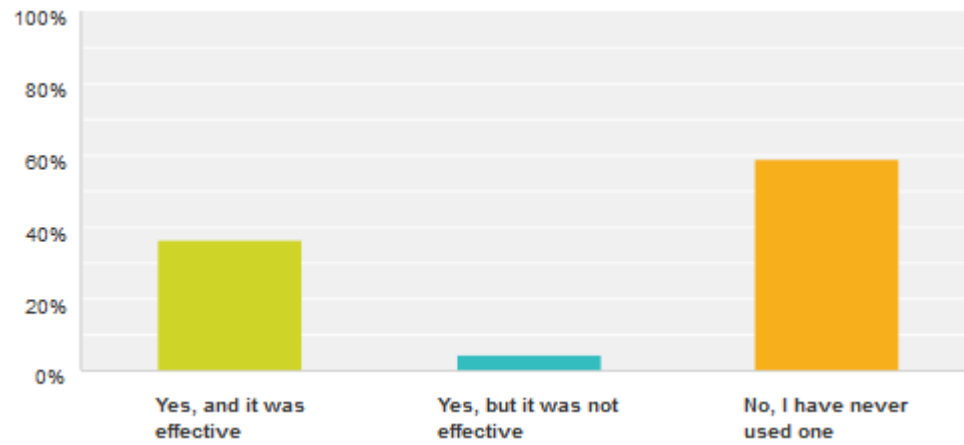


Figure 3. Use and perceived effectiveness of social skills programs.

Table 3

Participant Responses to Question 3

Response	Number of Responses	Percent
Not important - I feel that as long as the child has intelligence he or she will do fine in school	0	0%
Sometimes important - I feel that the ability to get along with others can sometimes help a child do well in school	2	4.7%
Important – I feel that without the ability to get along with others, a child will have a hard time doing well in school	13	30.2%
Very important – I feel that a child has to be able to get along with others in order to do well in school	28	65.1%

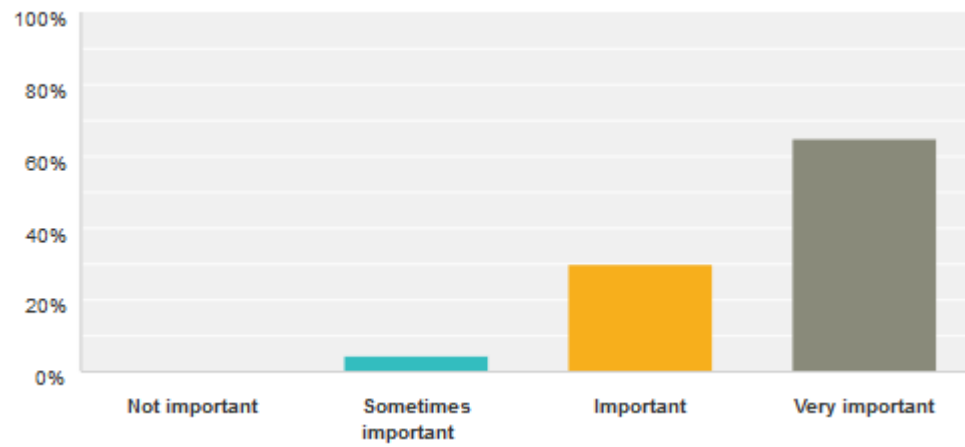


Figure 4. Perceived importance of social skills for academic success.

Table 4

Participant Responses to Question 4

Response	Number of responses – Important skill for getting along with classmates and Percent	Number of responses – Important skill for getting along with his or her teacher and Percent	Total Number of responses for skill and Percent of all Respondents Selecting Skill
Flexibility (the ability to ‘go with the flow’, try new things, deal with change)	36 87.8%	32 78.0%	38 92.7%
Agreeable nature (a ‘sunny’ disposition, gets along with most people)	27 65.8%	14 34.1%	27 65.8%
Academic intelligence (understands literacy and mathematical concepts easily)	3 7.3%	18 43.9%	18 43.9%
Emotional intelligence (understands facial expressions, can read body language, can read and appropriately respond to others' emotions)	40 97.6%	31 75.6%	41 100%
Politeness/manners (says ‘please’ and ‘thank you’, helps others)	22 53.6%	30 73.2%	32 78.0%
Knowing how to speak his/her mind (will speak in class, will stand up for him or herself and for friends)	29 70.7%	25 61.0%	36 87.8%
Patience (can listen while others speak, is willing to wait for a turn)	33 80.5%	33 80.5%	40 97.6%
Self-control (can sit for appropriate periods of time, can manage frustrations)	33 80.5%	36 87.8%	39 95.1%
Self-efficacy (has the belief that he/she can accomplish what he/she is attempting to do)	14 34.1%	28 68.3%	33 80.5%
Good attitude (is willing to try activities, will try to get along with others)	39 95.1%	36 87.8%	41 100%
Self-confidence (comfortable trying activities without close adult supervision)	25 61.0%	34 82.9%	37 90.2%

Table 5

Participant Responses to Question 5

Response	Number of Responses	Percent
Patience (e.g. willingness to bear with annoyance without losing one's temper)	41	100%
Self Control (the ability to manage one's emotions and behaviour)	38	92.7%
Flexibility (the ability to switch gears as necessary or to 'go with the flow')	40	97.6%
Understanding social cues (the ability to read facial expressions and body language)	37	90.2%
Empathy (the ability to understand, label and sympathize with emotions that others are feeling)	39	95.1%
Additional responses written in by participants (number of times mentioned):		
<ul style="list-style-type: none"> - Positivity (2) - Laughter/sense of humour (2) - Sense of perspective - Modelling social skills - Self-efficacy 		

Table 6

Participant Responses to Question 6

	1 Not important	2	3 Moderately important	4	5 Very important	Total	Weighted Average
Shorter duration (i.e. I prefer a program lasting 3 to 6 weeks)	21.05% 8	18.42% 7	47.37% 18	10.53% 4	2.63% 1	38	2.55
Longer duration (i.e. I prefer a program lasting 2 months or longer)	34.21% 13	21.05% 8	31.58% 12	7.89% 3	5.26% 2	38	2.29
Ease of preparation (whether everything is provided and ready to use)	7.69% 3	7.69% 3	20.51% 8	28.21% 11	35.90% 14	39	3.77
Strong theoretical basis (if the program is based on an educational or developmental theory such as those of Piaget or Vygotsky)	15.00% 6	17.50% 7	20.00% 8	25.00% 10	22.50% 9	40	3.23
Less time required per day/week (for example, one to three hours per week)	18.42% 7	23.68% 9	42.11% 16	13.16% 5	2.63% 1	38	2.58
More time required per day/week (for example, providing activities for five or more hours per week)	32.43% 12	35.14% 13	21.62% 8	5.41% 2	5.41% 2	37	2.16
Proven	0.00%	5.00%	30.00%	25.00%	40.00%		

effectiveness (whether the program has been tested and shown to be successful with other classes)	0	2	12	10	16	40	4.00
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Summary of Survey Results

Several themes emerge from the participants' responses. Limited awareness of the existence or availability of social skills programs, widespread understanding of the importance of social skills for academic success, and the perceived importance of emotional intelligence, a good attitude, and patience for getting along in the classroom are some of the important findings.

As shown in Table 1, 51% of respondents did not think they had access to a social skills program. While over 95% of respondents believed that social skills are important or very important for school success (see Table 3), 59% had never used a social skills program in their classroom (Table 2).

In the survey, educators singled out several skills for their importance in getting along with classmates, and other skills for their importance in getting along with teachers (Table 4). The three most important skills identified for getting along with classmates were emotional intelligence (identified as important by 97.6% of participants), a good attitude (95.1%), and flexibility (87.8%). The skills identified for getting along with teachers were self-control (87.8%), a good attitude (87.8%), and self-confidence (82.9%).

When taking the total responses into account for each social skill listed, whether they were considered important for children interacting with classmates or with teachers, the three skills that were considered most important were: emotional intelligence (being able to understand and respond appropriately to others' emotions), a good attitude (being willing to try activities and try to get along with others), and patience (being able to listen while others speak and wait for a turn). Social skills development and improving EF will

play a role in maximizing these skills. Sessions in the handbook are based on improving the ability to understand others' emotions and knowing how to respond appropriately. Sessions working on cognitive flexibility should support the development of the willingness to try new activities and improved social skills should foster a positive cycle of improving the ability to get along with others, having positive experiences reinforce the efforts made to get along, and thereby increasing the willingness to try and get along with others. Sessions aimed at increasing inhibition skills should also improve children's ability to demonstrate patience through listening and turn-taking.

Participants also indicated social skills they felt that teachers and other educators should demonstrate in order to support student social and emotional growth (Table 5). The most highly rated skills were patience (100%), flexibility (97.6%), and empathy (95.1%). Several participants also noted the importance of positivity and having a sense of humour as useful skills for maintaining a productive social climate in the classroom, a climate that is conducive to supporting student social and emotional growth.

When asked to rank the most important considerations for choosing a social skills program for the classroom, the participants weighted 'proven effectiveness' most highly (Table 6). The other top considerations were identified as 'ease of preparation' (having the program ready to implement without much additional work), and 'a strong theoretical basis for the program' (whether or not the program is based on an educational or developmental theory).

The above considerations were taken into account while developing the handbook. While proven effectiveness is not yet possible, the handbook was based on other programs and principals that have proven effective. The handbook was organised

to require as little additional preparation as possible from the educator who is implementing it. Finally, the handbook was developed with a strong theoretical basis in mind. The skills identified for support in the handbook include those identified as most important by the participants. Executive function activities will support self-control and flexibility. Social skill activities will support the development of emotional intelligence and self-confidence. Social decision making activities will support the development of a good attitude and will also support the development of self-confidence.

Thirty-two of the participants included stories demonstrating the importance of social skills for emotional well-being in the classroom. Time and time again, participants confirmed that lack of social skills (demonstrated by actions such as teasing, meltdowns, or bossiness) resulted in social exclusion and an inability or unwillingness to participate fully in classroom life. This lack of participation often impacted the student's academic growth, as well as his or her social interactions. In one example, a student would only choose one particular partner to work with and would not accept that for some activities he would have to work with a different partner (demonstrating a lack of flexibility). The student would react with physical aggression, causing the rest of the class to be frightened of him and avoiding having him as a partner or even sitting near him in circle.

Feedback from educators who responded to the survey and subsequently reviewed the handbook were positive. Comments included that it "seems easy enough to understand", "it's really good", it will have "positive benefits", and they "love the 'compliment tag' game – very positive". Other, more specific suggestions for the addition of visuals and the modification of some vocabulary have been integrated into the current handbook. Because only generic feedback was requested, the nature of the comments was

primarily generic. In any future evaluation requests, it would be preferential to provide a more specific evaluation criteria and evaluation tool.

The most surprising result from the needs assessment survey was the below-expected percentage of educators who were aware of the availability of social skills programs and the even smaller percentage that had made use of such a program. Given the overall awareness of the importance of social skills for academic success, this was an unexpected disparity. What was not surprising was the number of stories that the educators were able to recount regarding the difficulties experienced by children with EF and social skills challenges.

In summary, only approximately half of educators were aware of being able to access an existing social skills program, and more than half had never used one. The vast majority of educators believed that social skills are important or very important for academic success. Educators identified emotional intelligence, a good attitude, and flexibility as the three most important skills for getting along with peers, while self-control, a good attitude, and self-confidence were identified as the top three skills for getting along with teachers. Proven effectiveness and ease of preparation were the top two considerations educators identified for choosing a classroom program. Given these priorities and preferences, the handbook has been developed in order to provide another option for social skills development in the classroom. The handbook takes into account educators' preferences for program ease of preparation, the social skills educators believe to be of importance to academic success, and the benefits provided by focusing on EF as part of social skill development.

CHAPTER FIVE: HANDBOOK

A child's social skills and the ability to control his or her emotions play a big part in school success. Executive function (EF) refers to some of the brain processes that contribute to these skills. EF includes the ability to hold onto thoughts and use them (working memory), the ability to stop oneself from acting on impulse (inhibition), and the ability to see things from different viewpoints or change thought patterns (cognitive flexibility). Recent research has shown that EF and social skills are closely linked and that both can be improved with effective programming.

Developing social skills requires reading body language and social cues, understanding emotions, and knowing how to respond to other people. EF plays a role in these skills. For example, a child needs to use working memory to keep a friend's feelings in mind while they are having a discussion, the child needs inhibition to keep from blurting out the first thing that comes to mind, and the child needs cognitive flexibility in order to try and see things from a friend's point of view.

Activities and ideas for strengthening your students' EF and social skills are presented in this program. The goal of this handbook is to improve students' social and academic success by simultaneously working on strengthening the brain functions that support the ability to effectively use social skills, learning about social skills directly, and giving students a chance to practice those skills in a supportive, supervised environment.

Activities were chosen to provide options for students who are emergent readers and those who are more proficient readers. The activities are intended to keep in mind the needs of young children to be creative and active. Options are often provided to

enable each child to find enough challenge to be interested and engaged without being so difficult that any child becomes discouraged. With your help, every child should be able to find success with activities he or she enjoys.

Activities are organized into three sessions per week for six weeks, but it is up to you to use a schedule that works for you and your students. One session each week focuses on EF skills, one session focuses on social skills, and one final session focuses on encouraging the children to practice their skills with social decision making. Each activity is presented once in the course of the sessions; however, repeated use of the activities may reinforce the lessons and strengthen the skills developed by them. Feel free to use the EF activities repeatedly during and following the weeks of the intervention. Additional strategies can be useful for including EF skills throughout the curriculum. These activities can also be included multiple times during the week to augment the activities outlined below.

- Including practices such as guided movement (yoga) and guided breathing (meditation) help children focus on the present moment, focus on their breathing, and pay attention to how they are feeling. Thoughtful breathing can be valuable for easing transition times.
- Using ongoing games that require children to stop what they are doing on command (such as ‘What time is it Mr. Wolf?’ and “Freeze Tag”) helps to reinforce their inhibition skills.

Overview

Table 1

Executive Function and Social Skills Plan Overview

Week	Executive Function Skills	Social Skills	Social Decision Making Skills
1	1. Introduce the idea of self-monitoring - Levels of stimulation - Up- and down-regulation strategies	2. Recognizing emotions - Recognize the visual and physical cues of emotions in themselves and others - Identify the physical sensations associated with anger	3. Knowing about feelings and social choices - Scenarios and role playing
2	4. Head and toes - Practicing elements of executive function by responding to commands in unusual ways	5. Initiating and empathy - Stories from different viewpoints (cognitive flexibility) - Starting social interactions	6. Empathy - Deciding on appropriate actions
3	7. Interactive movement games - Self-regulation - Physical activity	8. Disclosure: How to have a conversation - Listening behaviour - Starting, continuing and ending conversations	9. Adapting behaviour to circumstances - Thinking about behavioural norms in different situations
4	10. Buddy reading - Turn-taking - Self-regulation	11. Emotional support - Reinforcing empathy - Using kind words	12. Social choices - The importance of close friendships - Making good decisions
5	13. Red Light, Purple Light - Inhibition, cognitive flexibility - Turn taking	14. Negative assertion - Being brave - Saying 'no' - Making alternate suggestions	15. Honesty - The importance of truthfulness
6	16. Drum beats - Inhibition, working memory, and cognitive flexibility	17. Conflict management - Self-talk - Managing anger	18. Decision making - Honesty

Lesson Plans

Week 1

Session 1: Introduction to self-monitoring.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Be introduced to the concept of levels of stimulation
- Begin to recognize when they are over- or under-stimulated, or ‘just right’
- Learn several techniques for up- and down-regulating their arousal states

Materials

- Analogy of choice chart (bears, car engine, colours, or children)
- Scenarios

Procedures.

Prior to starting: Review the chart choices and choose one that you feel will best engage your class. The important concept is that sometimes people are over stimulated (too much information, too many big feelings, too much energy, or too many sensations), sometimes people are under stimulated (tired, sick, bored, daydreaming, or not enough sensation), and sometimes people are just right – calm and alert and ready to learn.

Step 1: If you have a Smartboard, you may wish to post the chart electronically so you can manipulate the prompts. If you prefer to carry on without technology, the chart may be reproduced for each child or put on a poster.

Step 2: Show the chart to the children and ask how they are feeling right now. Try to elicit responses about being interested, alert, and paying attention. Discuss how we look when we are paying attention (eyes on teacher or work, calm, etc.). Tell the children that scientists have found that we are most ready to learn when we are calm and alert. Have a child or two show the green zone on the chart and relate it to the feeling of calm and alert.

Step 3: Ask if anyone has ever felt tired. Ask children to describe or tell a story about when they were tired. Ask if they felt that they could learn easily when they were tired. Show the left (blue) side of the chart and say that this is where we are when we are under stimulated – we may be bored, or tired, or daydreaming in this zone. Have the children demonstrate what that looks like.

Step 4: Ask how we look when we are angry (fists clenched, face red, scowling mouth, eyes tight, brow down). Ask how we look when we are overwhelmed or there is too much going on (eyes closed, hands over ears or eyes). Explain that this is the red zone or where we are when we are over stimulated – we may be frustrated, angry, worried, or overwhelmed in this zone).

Step 5: Remind children of how they look when they are calm and alert. Explain that there are five ways to get back to this zone when we find ourselves in the blue zone or the red zone. The short forms are Mouth, Move, Touch, Look, and Listen. Post a blank copy

of the following table. Ask the children what strategies they think might fit in each category. Acknowledge children's ideas and fill in any missing information.

Table 2

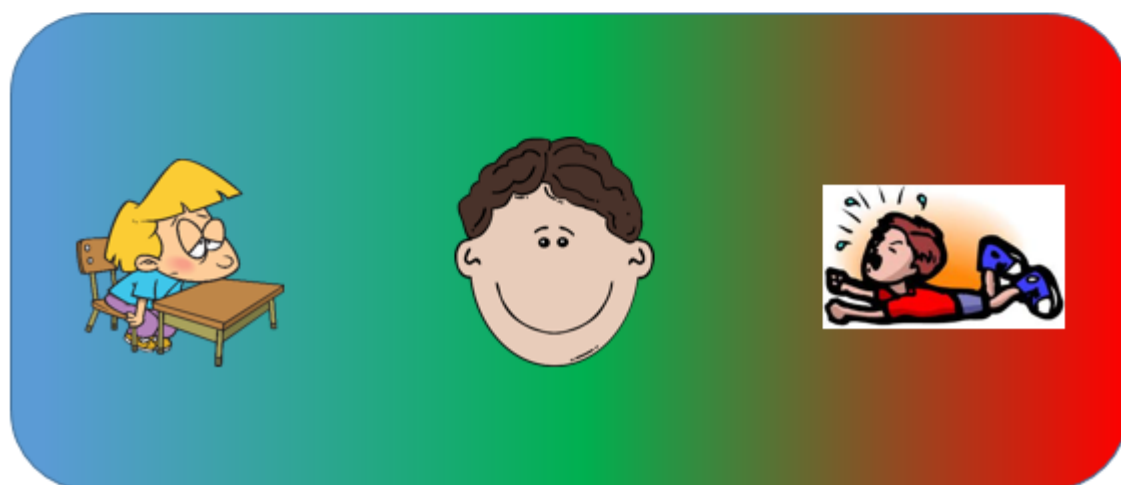
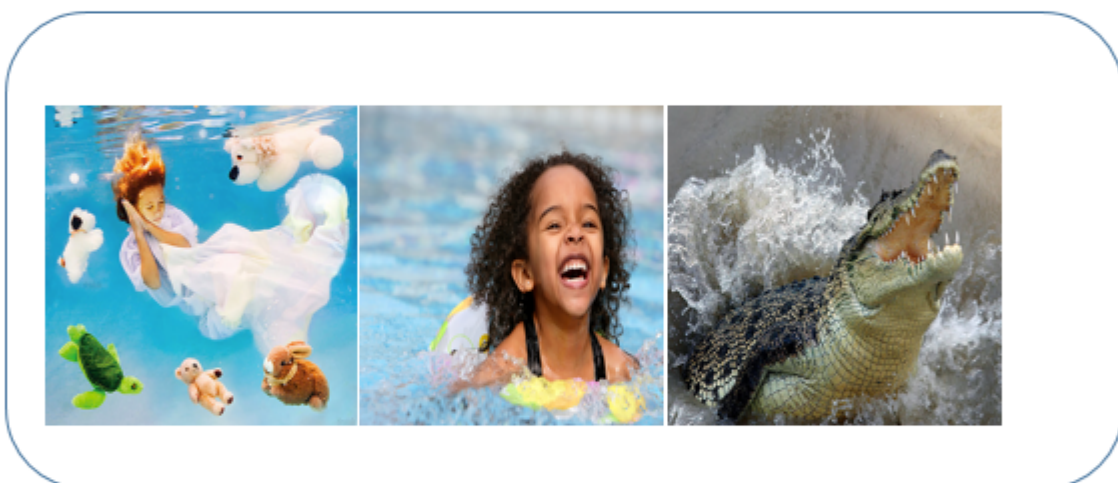
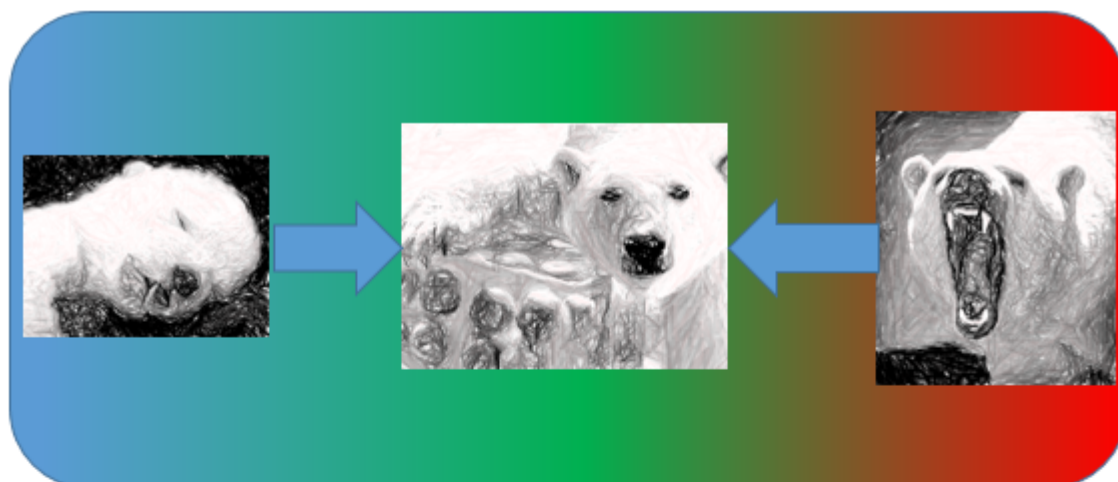
Sample Strategies for Returning to the Green Zone

Type of Strategy	Examples
Mouth	<ul style="list-style-type: none"> - Take deep breaths - Sing a song - Suck on a small candy, on a pencil, or on a pencil topper (if allowed) - Chew gum - 'Chew'leries (such as those found at http://www.especialneeds.com/speech-language-oral-motor-tools-chewy-toys.html)
Move	<ul style="list-style-type: none"> - Star jumps - Moving a heavy object - Sit on an exercise ball or disc cushion - Go for a walk or a drink - Deliver an object to a designated person
Touch	<ul style="list-style-type: none"> - Handle worry beads - Roll play dough - Hold hands with a friend - Stroke a class pet or a friend's arm (if they're willing)
Look	<ul style="list-style-type: none"> - Remove visual clutter (for teachers) - Dim the lights - Take a 'look outside' break - Look at a book of photographs or other artwork
Listen	<ul style="list-style-type: none"> - Ask if a chime could be used instead of a buzzer for school time changes (for teachers) - Put tennis balls on the bottom of chairs in the classrooms to provide more quiet (for teachers) - Put headphones on and listen to quiet music - Block out noise with ear muffs/headphones

Note. Some strategies are identified as being 'for teachers'. These strategies are for teachers who identify areas that they believe the whole class may benefit from addressing; these strategies do not need to be shared with the children.

Step 6: Go through the discussion prompts and place the pictures where they fit on the chart (if you have room). Please accept simple names for the emotions, as recognizing emotions will be a topic for the next session at which time the children will further develop their vocabulary around emotions.

Step 7: Post zone chart(s) where the children can see and post strategies nearby. Refer to them repeatedly as needed. You may ask the children what zone they are in throughout the day. If you see the class is over stimulated (or lethargic) you may point out to them that they are in heading into the red (or blue) zone and engage in a whole class strategy such as going for a quick walk around the school, engaging in deep breathing together, doing class star jumps or listening to quiet music.



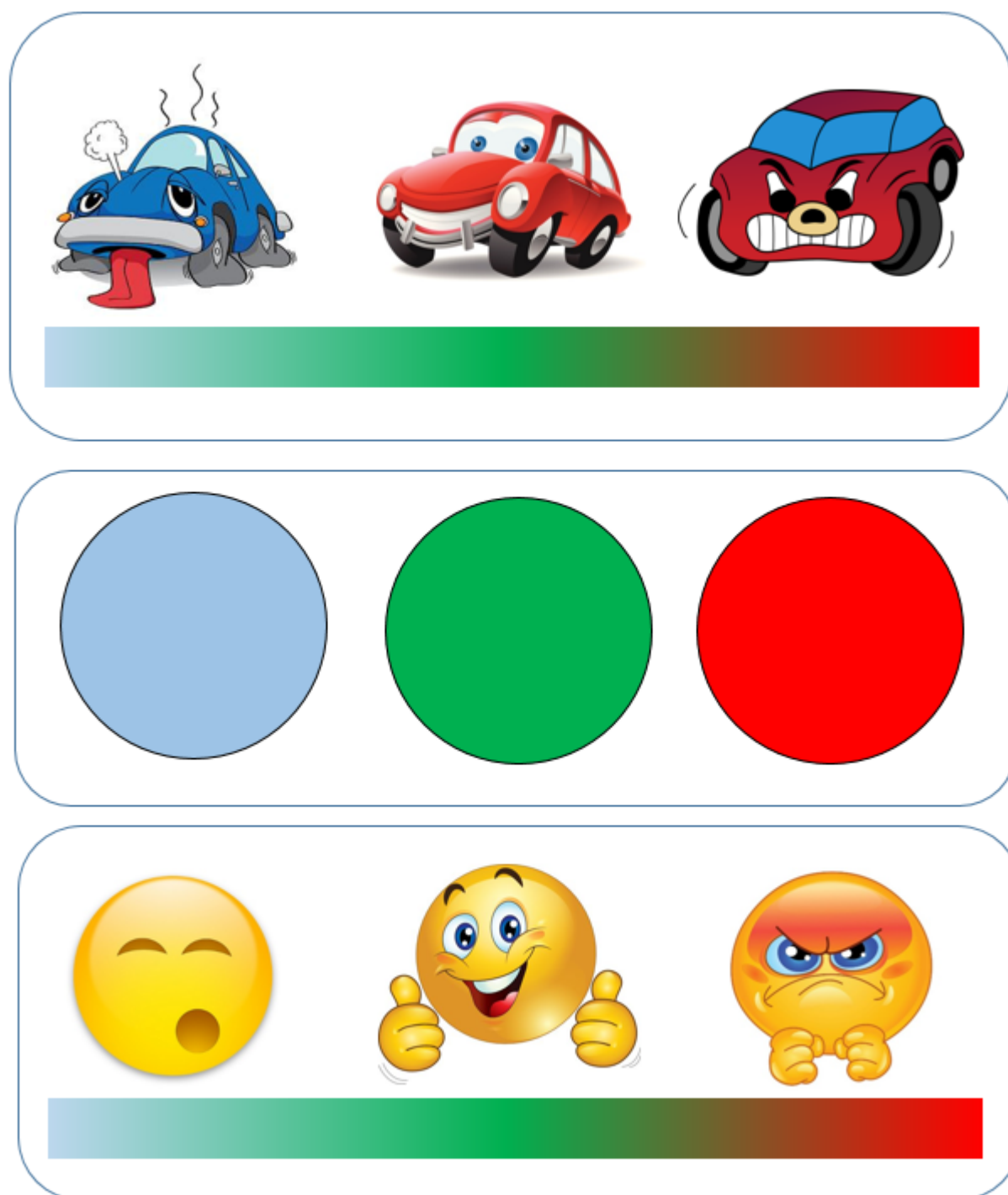


Figure 1. Sample stimulation level charts.

Polar bear with apples modified from picture retrieved from http://dybiz.com/sites_randomblog/cute-panda-eats-a-treat-funny-polar-bears-and-pandas-too
Polar bear yawn/growl modified from picture retrieved from https://www.flickr.com/photos/pacs_shots/9129673099/in/album-72157631903183038/
Girl sleeping image retrieved from <http://www.favim.com>
Girl swimming image retrieved from <http://blackclarksville.com/2014/10/31/indoor-aquatic-center-now-offers-private-swimming-lessons/>
Crocodile image retrieved from www.olsvik.info
Other images from clipart

This is James. He had to stay up late last night to play on his hockey team. How do you think he's feeling?

Which zone is he in?

What can he do to be ready to learn?



This is Peter. Peter is finding his classroom is noisy. How do you think he's feeling?

What zone is he in?

What can he do to be ready to learn?



This is Walker and Ty. They are enjoying their work. How are they feeling?

What zone are they in?

Are they ready for learning?



This is Jay. He is daydreaming about his trip to the park. How is he feeling?

What zone is he in?

What can he do to get ready to learn?



This is Prim. She is looking forward to reading her new book today. How is she feeling?

What zone is she in?

Is she ready to learn?



This is Lily. She really wanted to play with the blocks but there were too many people there already. How do you think she's feeling?

What zone is she in?

Is she ready to learn? What can she do to get ready to learn?



Boy yawning modified from picture retrieved from <http://psychcentral.com/news/2010/09/21/severely-autistic-children-miss-yawning-cues/18497.html>

Overwhelmed boy modified from picture retrieved from <http://www.realpediatrics.com/adhd.html>

Boys working modified from picture retrieved from <http://gomusicgarden.com>

Boy daydreaming modified from picture retrieved from www.creative-writing-ideas-and-activities.com

Girl looking at camera modified from picture retrieved from <http://www.jezebel.com>

Angry girl modified from picture retrieved from <http://www.f-covers.com>

Figure 2. Discussion prompts.

Session 2: Recognizing emotions.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shellenberger, 1996)

Overview of expectations and activities.

Students will:

- Recognize the visual and physical cues of emotions in themselves and others
- Identify their unique physical sensations associated with anger in particular
- Use strategies from Session 1 to down-regulate from anger

Materials

- Feelings Bingo cards, plastic markers for tracking progress on cards OR paper cards and bingo daubers for each student (Figure 7)
- Unbreakable mirrors for each student
- Worksheets for each student: what do you feel when you are angry (Figure 8)

Procedures.

Prior to starting: Review classroom rules for group discussions, including turn-taking, listening to others while they are talking, participating and respect for others' opinions.

Step 1: Introduce the topic of feelings by playing a round of Feelings Bingo (a sample card is included in Figure 7). Review the different types of feelings and facial characteristics of each (e.g. mouth shape, eyebrow shape, etc., see figures 3, 4, and 5 below for reference). If children find this challenging, restrict the number of emotions depicted to 5 basic emotions (e.g. happy, sad, angry, afraid, and surprised). If children

are ready for more of a challenge, you may wish to introduce additional emotion words and include a discussion of intensity of emotions and how our words vary according to this intensity; for ideas, see Figure 6.

Step 2: Have the children sit in a circle and hand out the mirrors. Have children recall a time when they felt angry and ask them to make an angry face. Invite the children to note the similarities and differences between their angry face and others' angry faces. If children find this challenging, guide them to notice their eye muscles, eyebrows, lips, and mouth shape. If children are able to successfully complete this activity, you may wish to repeat it with other emotions (e.g. happiness, disgust, sadness, joy, etc.). Children may benefit from you providing them with a scenario in which they would experience this emotion. If you were asking them to depict disgust, for example, you might say, "Think of your least favourite food. Imagine that you have a big bowl of that in front of you and you have to take a bite."

Step 3: Discuss where else in the body they feel anger (e.g. head, stomach, fists).

Step 4: Explain to students that they will be drawing their faces and physical feelings associated with anger. Brainstorm words associated with anger and feelings to support students in labeling their pictures. Write these words in a visible location so they are available for reference while students are working.

Step 5: Hand out "What do you feel when you are angry?" sheets (Figure 8) and have students complete and label their pictures.

Step 6: Gather as a group to share pictures and compare experiences. You may need to point out to children that everyone experiences their feelings in different ways and that

that is to be expected, all experiences are normal and acceptable. Remind children of the down-regulating strategies they learned in Session 1 and practice one or two in relation to anger.

Image for Figure 8 is from Julien (2013).

Additional teacher references:

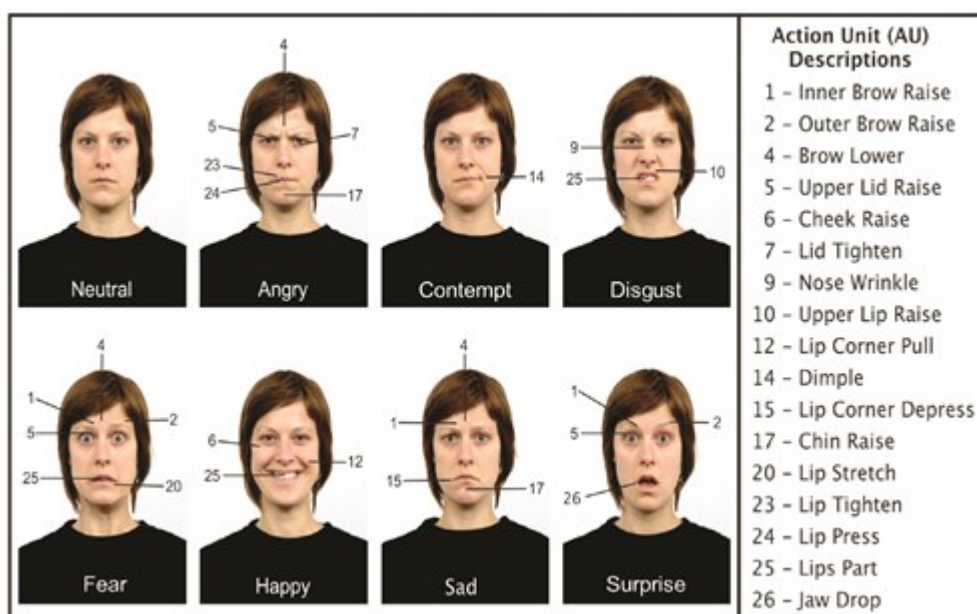


Figure 3. Descriptions of muscle actions in emotion depictions.

Retrieved from: http://www.theabp.org.uk/media/3213267/reading-emotions-figure-1_500x318.jpg

The Seven Universal Facial Expressions of Emotion



Figure 4. Seven universal facial expressions of emotion.

Retrieved from: <http://www.csitechblog.com/.a/6a01348648f6e4970c01538fdca547970b-800wi>

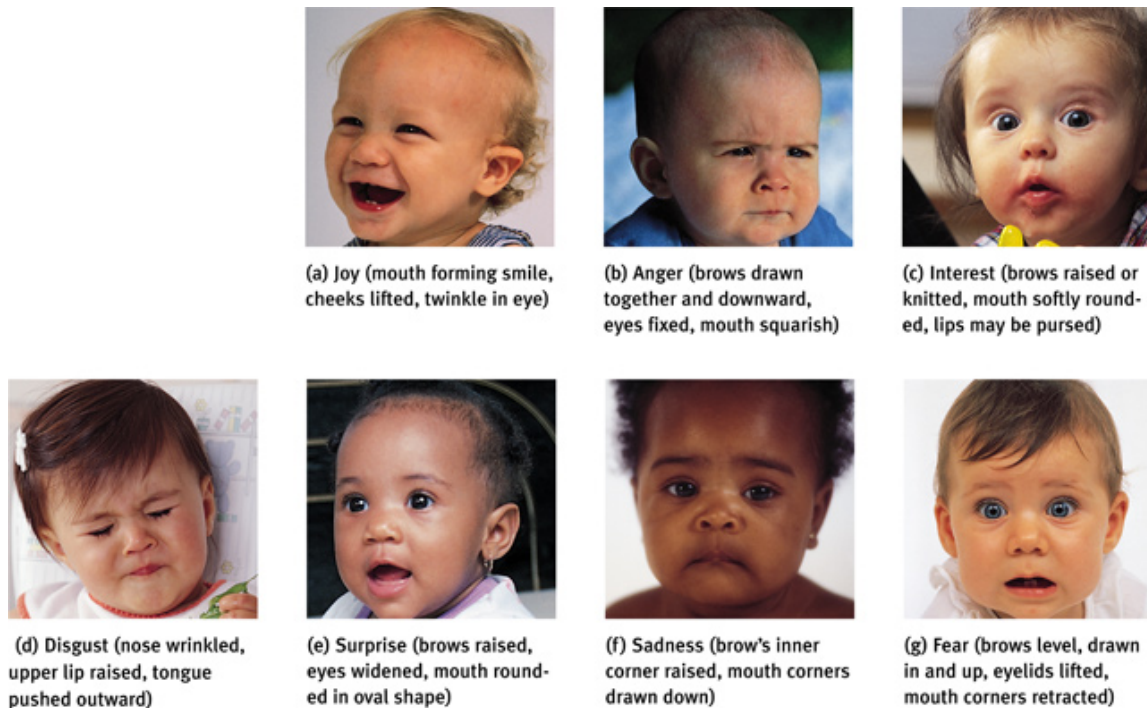


Figure 5. Babies depicting basic emotions.

Retrieved from:
<https://pantherfile.uwm.edu/plenz/www/introFilesF07/imgs/expressions2.jpg>

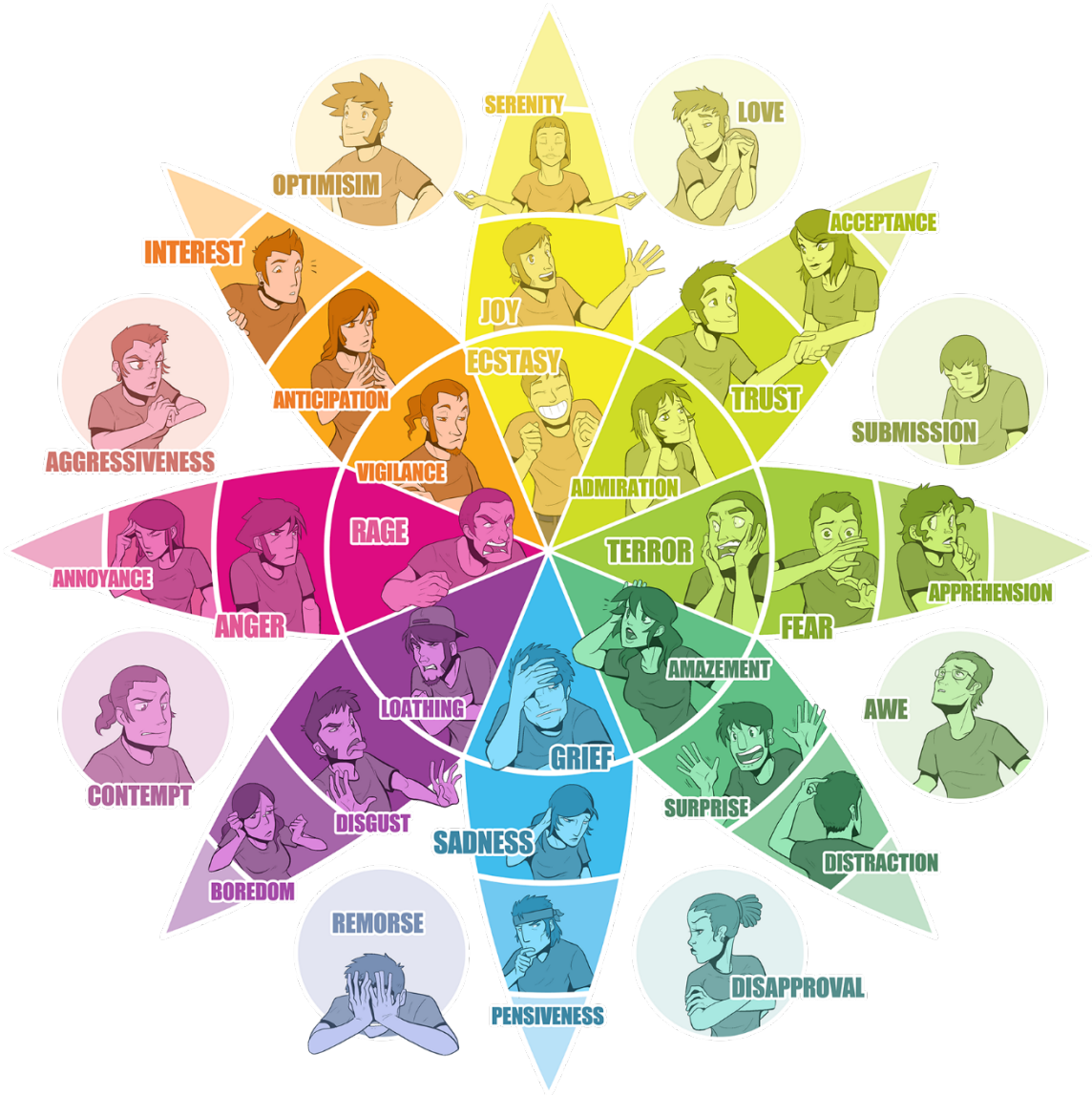


Figure 6. Additional emotion words with degrees of intensity suggested.

Retrieved from: <https://evelynzheng5133.files.wordpress.com/2015/07/wheellarge.png>

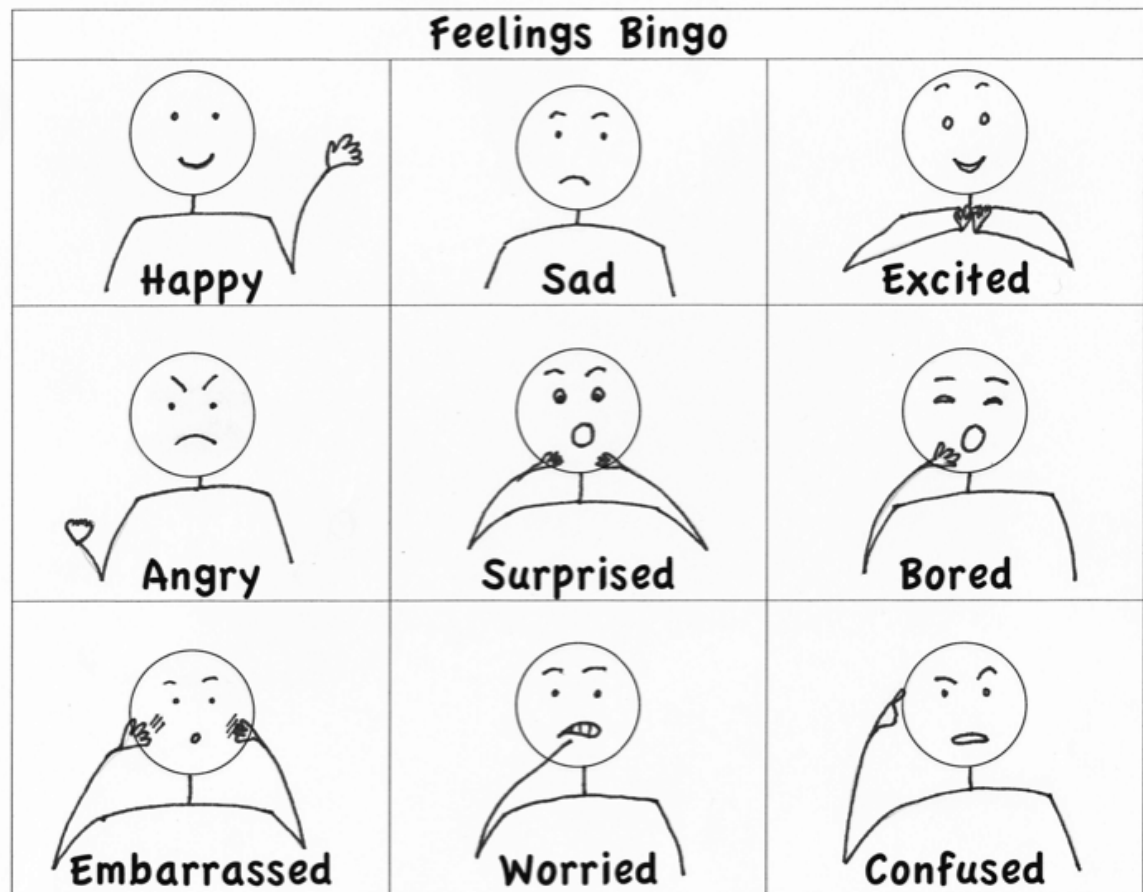
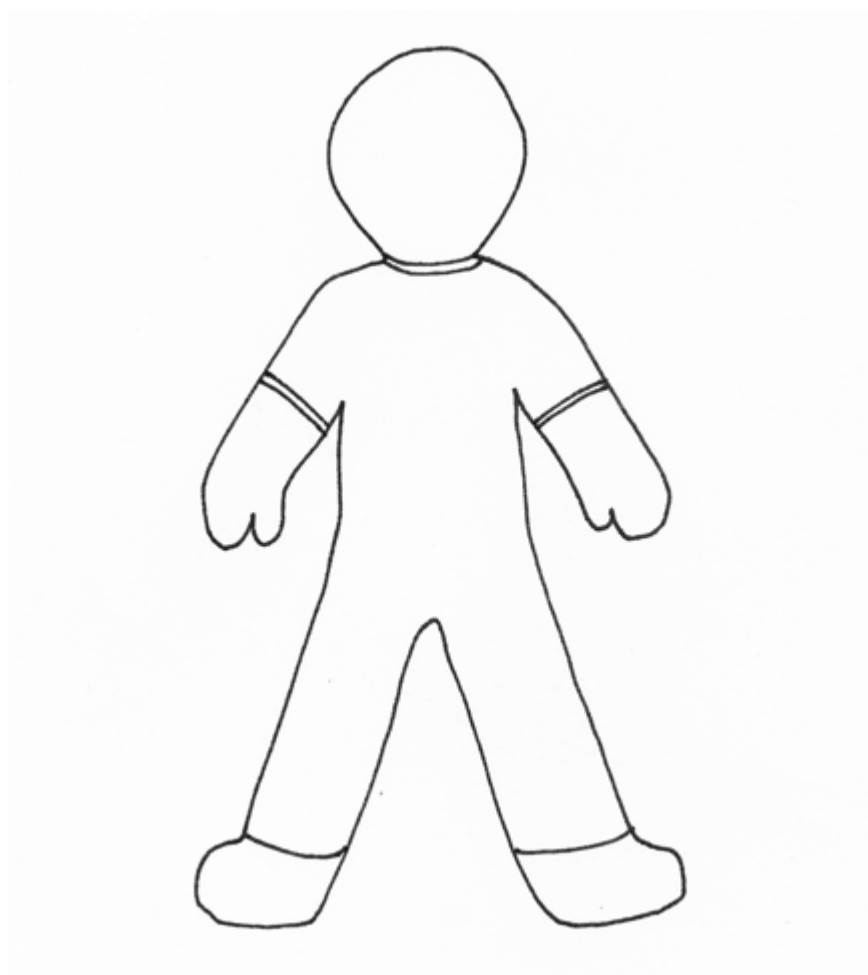


Figure 7. Sample Feelings Bingo Card (Facilitators will need several different cards which can be made by rearranging the squares on the sample card or by taking photographs of participating students prior to the activity as they demonstrate different emotions and arranging them on bingo cards). If nine emotions are too confusing for the students, reduce the number on each card to four, and ask the students to fill the entire card to achieve ‘bingo’.

What do you feel when you are angry?

Some people feel their hands making fists. Some people feel like their head is pounding. Some people feel like a snake is squeezing their stomach.

Draw a picture of what you feel when you are angry:



Name: _____ Date: _____

Figure 8. Worksheet: What do you feel when you are angry?

Session 3: Social decision making: Knowing about feelings.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1990; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Think about their social options in response to different scenarios
- Discuss which options are most appropriate

Materials

- Social decision stories
- A way to make notes that children can see (blackboard, whiteboard, overhead, smart board, etc.)

Procedures.

Prior to starting: Remind children about your classroom discussion rules, if that would be helpful for your students.

Step 1: The first step is to reach a class consensus regarding the type of classroom you would all like to have. This supports the development of a positive class culture. The approach suggested here is to think about the kind of planet you would suggest an alien choose in the following scenario (for older children, you may wish to change the scenario slightly from an alien choosing between planets to a family choosing between two communities):

Beeps, an alien, wants to go and live on a new planet. You are Beeps' friend and advisor and you will help make the decision. There are two planets to choose from: Ardy and Zoom. Ardy is a violent planet where everyone is only concerned about their own feelings and getting their own way. People on Ardy don't care if they hurt someone else. Zoom is a planet where people look after each other and care about other's feelings. On Zoom they have fun, but they try to make their planet a better place and they feel bad if they accidentally hurt someone. Which planet would you advise Beeps to choose?

Listen to the children's opinions and guide the discussion as necessary, guiding them to choose Zoom:

- Where do you think Beeps would have a nicer welcome?
- What do you think the big problem is on Ardy?
- Which planet would be more peaceful?
- On which planet would you be able to trust people?

Step 2: Once you have established that Beeps should choose to live on Zoom, the planet where everyone looks after each other and is kind to others, suggest that your classroom can be that kind of planet. Help the children keep this decision in mind as they discuss the following scenarios. Some scenarios are more challenging than others; start with the first one and stop when the children lose interest or are having trouble with producing solutions. If children are having trouble finding solutions, or if they have been sitting too long (and need to regulate their alertness level), let children get into pairs and act out the scenarios. Ask them to pay attention to how each person is feeling. Make suggestions of things children could say or do if students are still having challenges. Choose several re-enactments to show the rest of the class and discuss.

Scenarios:

- A. Greeting others: Chad is walking down the hallway and sees someone he knows a little bit. What can he do to show that he is friendly?
- B. Offering help: Mo sees Clay is carrying two bags and three books. Chad is having trouble opening the classroom door. How do you think Clay is feeling? What do you think Mo could do?
- C. Reading others: Gemma sees Dale walking down the hallway with his head down and a frown on his face. His shoulders are slumped over. How do you think Dale is feeling? What could Gemma do or say?
- D. Naming your feelings: Anna is not feeling like she normally does. Her throat and stomach feel tight and she feels like crying. What emotion do you think Anna is feeling?
- E. Naming your feelings: Johann's heart is beating quickly, he is smiling, and he feels like jumping around. He feels like laughing. What emotion might Johann be feeling?
- F. Being assertive: Nella is happily playing with a toy car when Gabby comes and takes it away from her. What should Nella say?

Week 2

Session 4: Head and toes.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shellenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice using the systems of executive function: using inhibition to stop themselves from following the directions as spoken, working memory to remember what they are supposed to do, and cognitive flexibility to accept the changing rules

Materials

- None required

Procedures.

Prior to starting: Explain to the children that sometimes things change and we need to be flexible. Rules can change and you are going to try and keep the on their toes.

Step 1: Explain that the first set of rules are as follows – when you say ‘head’, they should touch their heads, and when you say ‘toes’, they should touch their toes. After a few successful rounds say ‘SWITCH’. Now when you say ‘heads’ they should touch their toes, and when you say ‘toes’ they should touch their heads.

Step 2: If children are having difficulty, go back to the original rules and build the children's confidence again. If the children have found the first switch straightforward, switch every few rounds for a few minutes. If they continue to find it simple, add a third element. For example 'heads' could mean to touch their elbows, 'elbows' could mean to touch their toes, and 'toes' could mean to touch their heads.

Step 3: For an additional challenge, have children suggest switches. For example 'stand up' could mean lie on the floor, and 'jump three times' could mean they should stand on one leg.

Session 5: Initiating and empathy.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shellenberger, 1996)

Overview of expectations and activities.

Students will:

- Begin to think about different people's perspectives
- Have an introduction to initiating interactions with others

Materials

- A book featuring characters with different perspectives (suggestions are included below in step 2)

Procedures.

Prior to starting: Place a book on the table standing up with one chair facing the spine and one chair facing the open pages (choose a book that will let them see different things).

Have one child sit in each chair.

Step 1: Ask one of the children to describe what they see – colour, picture, etc. Then, the other child should describe what they see. Ask the rest of the class who is right. Reach consensus that both children are right, they are just seeing the book from different perspectives.

Step 2: Read a book that features characters having different perspectives – for example *Seven Blind Mice* by Ed Young, *Dr. Xargle's Book of Earthlets* by Jeanne Willis, or *I Will Never Not Ever Eat a Tomato* by Lauren Child. Books featuring 'fractured' fairy

tales such as *The True Story of the Three Little Pigs* by Jon Scieszka may also be appropriate. Follow up by making a connection to people having a variety of points of view, and to that we need to think about other people's perspectives to understand how they might be feeling.

Step 3: Discuss the following scenario – How do you feel when you see someone playing and you would like to join in? How can you tell if they are ready to have someone join in? What can you say to them? Brainstorm a variety of 'opening' phrases that you might use when asking to join a group, initiating play, or starting a conversation. Remind children that they should be fairly near the person or group with whom they would like to engage. They should wait for a break in conversation, if appropriate. Examples of useful phrases might include "That looks like fun, can I try?", "I like ____, too. What do you like best about ____?", or "Do you want to play ____ with me?"

Session 6: Social decision making: Empathy.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1984; Shanker, 2013; Williams & Shellenberger, 1996)

Overview of expectations and activities.

Students will:

- Think about their social options in response to different scenarios
- Discuss which options are most appropriate

Materials

- Social decision stories (scenarios)

Procedures.

Prior to starting: Remind the children about last week's discussion regarding the kind of classroom they would like to have (Zoom as opposed to Ardy).

Step 1: As with last week (Session 3) - some scenarios are more challenging than others, so start with the first one and stop when the children lose interest or are having trouble with producing solutions. If children are having trouble finding solutions, or if they have been sitting too long (and need to regulate their alertness level), let children get into pairs and act out the scenarios. Ask them to pay attention to how each person is feeling. Make suggestions of things children could say or do if students are still having challenges.

Choose several re-enactments to show the rest of the class and discuss.

Scenarios:

- A. Not feeling included: Raven and Sophie have been friends for a long time. At recess Raven is playing with a different friend and isn't asking Sophie to join in. Sophie feels left out, what should she do?
- B. Dealing with being worried: Colette's Grandma meets her outside after school every day but today her Grandma isn't waiting where she usually does. Colette is very worried. What can Colette do?
- C. Empathy and dealing with feelings: Mohana's best friend said that they can't play together today. How do you think Mohana feels? What can Mohana do?
- D. Being affectionate at school: Rubin sees a friend he likes at recess. How can Rubin let his friend know that he's happy to see him?
- E. Problem solving: Angus has a problem. He forgot his lunch at home. How do you think Angus feels? What can Angus do?

Week 3

Session 7: Interactive games following directions: Captain's Daughter.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Warner 2015; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice following directions and changing roles

Materials

- A large open space is preferable – a gym or outdoor space, for example

Procedures.

Prior to starting: Explain your expectations, the rules, and guidelines to the children

Step 1: Explain to the children that you are all on a ship on the high seas. You will begin as the captain and they must follow directions. Designate one wall or direction as the front. Begin with the children in a single file line in front of you. Begin with four or five 'orders' and add more as the children are able to follow successfully.

Table 3

Sample Directions for Captain's Daughter

When you say	The children should all
Bow	Run to the front
Stern	Run to the back
Life preservers	Join hands with at least two other people
Someone's overboard	Lie on their backs and pretend to swim
Captain's daughter	Curtsey
Submarines	Lie on their backs with one leg straight up in the air
Shark attack	Run to the sides of the space
Rowboats	Find a partner and sit feet to feet holding hands, lean back and forth as if rowing
Starboard	Run to the right side of the room
Port	Run to the left side of the room

Additional instruction/order ideas may be found at

<http://www.teachingideas.co.uk/warm-up-ideas/pirate-ship>

Step 2: Choose a child to act as the captain and give orders. Rotate through as many children as possible to let the children experience different roles. Children could be allowed to choose their successor from the children who have not yet had a turn.

Session 8: Disclosure: How to have a conversation.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1984; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Realize that sharing things about ourselves is one way to build a friendship
- Think about ways to start, maintain, and finish a conversation
- Think about things they can say or do during a conversation to be a good listener and a good conversation partner

Materials

- White board or other method of writing suggestions
- Conversation sheet (Figure 9) (or puppets if you prefer that the children not be required to write)

Procedures.

Prior to starting: Discuss with the children the ways in which we can build friendships – strategies may include things like playing together, being on a sports team, doing crafts together, and having conversations. You may ask the children how they met their current friends and what they did together as they were becoming friends. Please be sure to note that talking together and getting to know one another are important to building a friendship.

Step 1: Remind the children about the discussions you had in Session 5 about initiating play. Discuss how we might be aware if it is a good time for a conversation – is the other person busy? Should the student be doing something else? Is the other person’s tongue sticking out a little (an unconscious sign that the person does not want to be bothered)? If the answer to all these questions is no, then it might be OK to initiate a conversation. Ask for suggestions for ways to initiate, or start, talking with someone. Some examples of the ways interactions may start is by saying ‘excuse me’, or asking a question such as ‘what did you do this weekend?’, ‘do you enjoy dancing/reading/movies/music?’, or ‘have you ever been to a big city?’ Make a list of the children’s suggestions. Point out that if the children don’t know the person they should start with “Hi, my name is _____”.

Step 2: Let the children know there are some secrets to keeping a conversation going. Ask if they can guess. You could act out some of the ways that conversations are discouraged e.g. eyes wandering, turning away, frowning, not giving the other person a chance to talk. Write down some suggestions about what we look like when we’re listening and paying attention (such as showing interest, making eye contact, taking turns talking). If children understand this well, you may add information about what people do when they would like a turn to speak (e.g. taking a deep breath, opening their mouths to speak, leaning forward) or if they are bored or interested in changing the topic (checking the time, yawning, not making eye contact).

Step 3: Ask the children to brainstorm topics that are appropriate for discussions with friends. Some suggestions might include pets, travelling, food, school, sports, hobbies, toys, video games, books, music, wishes, and superpowers. If you feel it is necessary,

you may also remind the children that some topics are inappropriate for conversation unless you know the other person very well (such as their parents).

Step 4: This step is about ending a conversation gracefully. You may begin by practicing the skills from Steps 1 and 2. Choose a child to demonstrate with you but after you have successfully started and continued the conversation for a minute or two, just turn and walk away. Then ask the class how they think the student felt when you did that...did it feel good or too abrupt? Ask for suggestions for how to wrap up a conversation. Some suggestions may include letting the other person finish talking, and saying things like “This was fun but I have to go now”, “I enjoyed talking with you, see you later”, “I have to get back to work now”, or “Talk to you later”. Write some suggestions where the children can see them.

Step 5: Consolidate what children have learned by having children fill in the conversation sheet (Figure 9) or act out a conversation with a friend using puppets.



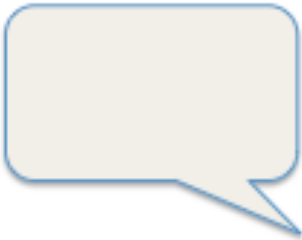



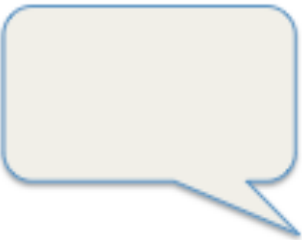









Start the conversation				
Continue the conversation				
				
Finish the conversation				

Figure 9. Conversation sheet.

Session 9: Social decision making: Adapting behaviour to circumstances.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shellenberger, 1996)

Overview of expectations and activities.

Students will:

- Think about different ways they adapt their choices depending on where they are and who they are with

Materials

- Puppets or pipe cleaners (optional)
- Different rules place chart

Procedures.

Prior to starting:

Step 1: Ask the children to think about the voices they use outside at recess and the voice they use during quiet play in the classroom. Are they different? Ask for suggestions from the children about places they go where they act differently (e.g. school, home, movie theatre, church, soccer field, hockey arena, etc.).

Step 2: Ask the children to act out the following scenarios with a friend or in a small group. Ask them to think about whether they need more information to know what to do (e.g. classroom rules, parental preferences, etc.). For a change of pace, children may use puppets or, if there is time, make pipe cleaner people to act out the scenarios.

Scenarios:

- A. You really have to use the bathroom. If you are in the classroom during free play, what should you do?
- B. You really have to use the bathroom. If the teacher is in the middle of a lesson, what should you do?
- C. You really have to use the bathroom. If you are at home reading a book, what should you do?
- D. You really have to use the bathroom. If you are out at the mall with your mom or dad and they are in the middle of a conversation with another adult, what should you do?
- E. You feel very tired. You are in the middle of the classroom and your teacher is speaking to the class. What should you do? (Note: this is a time when you may remind the children about some of the strategies from Session 1 that they might be able to use without disturbing those around them such as taking deep breaths, rubbing their hands together, stretching quietly, etc.).
- F. You feel very tired. You are at home watching television. What should you do?
- G. You feel hungry. You are in the classroom working on an assignment. What should you do?
- H. You feel hungry. You are in the middle of a movie theatre with your mom or dad. What should you do?

Step 3: Discuss with the children the concept of written (or explicit) and unwritten (or implicit) rules that most people follow. These may include how we dress, how we speak, and how we act. You may also refer to the idea of societal norms. Make note of how

some of the rules differ from place to place. Have the children draw pictures or use words to fill out a chart like the one below (if this is difficult for the children, or for younger children, remove the explicit/implicit column separation):

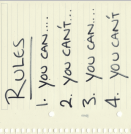

Community (e.g. church, mall, movie theatre)		
Home		
Classroom		
	Explicit Rule 	Implicit Rule 

Figure 10. Sample behaviours chart.

Images from <http://amiekaufman.com/wp-content/uploads/2011/02/rules.gif> and <http://4.bp.blogspot.com/-axneddBpqf0/U5X7T--bSaI/AAAAAAAAIQQ/D6E-xVzc1Y0/s1600/thinking-emoticon.png>

Week 4

Session 10: Buddy reading.

(Adapted from Diamond, Barnett, Thomas, & Munro, 2007; DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice turn-taking, regulating themselves to listen until it is their turn to talk
- Focus on the stories in preparation of asking a question (eventually internalizing this process to ask questions while they are reading on their own)
- Practice reading

Materials

- A book for each child and his or her independent reading level
- Ear and mouth pictures (figure 11)

Procedures.

Step 1: Discuss turn-taking with the children, reinforce the fairness of turn-taking and the idea that this is how conversations happen with our friends as well. Introduce the ear and lip cards. Ask whether ears listen or talk and whether mouths listen or talk. Ask children to find a partner (or assign partners who will work well together). Hand out books and one of each card to each pair of children. If you need to have a group of three, hand out two ear cards and a mouth card to each trio.

Step 2: Have children take turns reading their books. At first have the children just read one page (of a picture book) or a paragraph of a chapter book then trade cards and roles. Build up to two or three pages of a picture book or up to a chapter for older children. This turn-taking allows the children to practice self-regulating while they listen and has the added benefit of helping the children practice the memory skills of keeping track of where they are in multiple stories.

Step 3: Prior to changing roles, the listener should have a question prepared to ask the reader. Children may need to practice this as a group before trying individually.

Questions may include “What do you think will happen next?”, “How did you feel about (something that happened)?”, or may be based on something factual about the book, such as setting or character attributes.

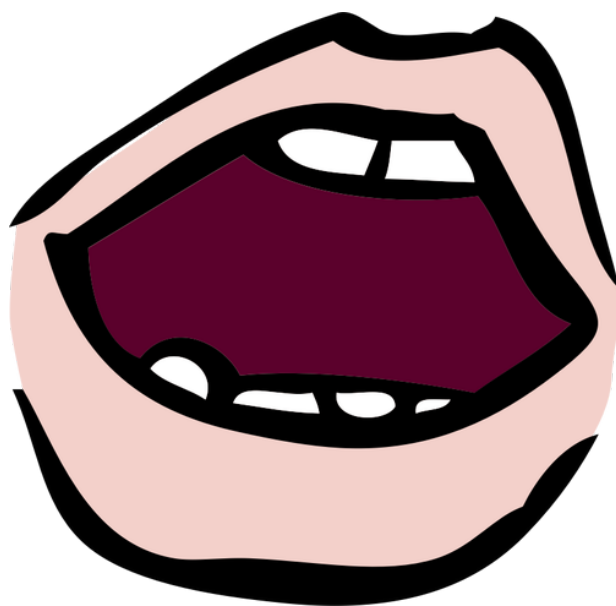


Figure 11. Ear and mouth cards.

Images from clipartpanda.com and publicdomainvectors.org

Session 11: Emotional support.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Warner, 2015; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice saying kind words to one another
- Reinforce empathy
- Recognize when a friend or classmate might need to be shown extra kindness

Materials

- A place to record ideas such as a smart board, whiteboard, or overhead
- Puppets or felt board with felt characters
- Two to three pipe cleaners per child

Procedures.

Step 1: Ask the children to recall a time when someone said something nice to them. Ask for some examples of kind things that they have heard or that they could say to others and write them where everyone can see them (e.g. “I like how you did your drawing”, “I love the colour of your shoes”, “I like how your hair looks today”, “You look happy”, “I think you are a great basketball player”, “I have fun playing baseball with you”, etc.). Try to encourage the students to focus on more than appearance.

Step 2: Have the children sit in circles of five or six children. Designate one child as ‘it’ and they start by saying a classmate’s name, and paying them a compliment. The child

they have chosen then replies “thank you”, to which ‘it’ replies, “you’re welcome”. As soon as they say, “you’re welcome”, the person they tagged becomes ‘it’. Once someone has been ‘it’, they may not be tagged again until the next round, the round ends when everyone in the group has been complimented.

Alternative version: If you have space or access to a gym you can play a more active version in which, similar to freeze tag, the person is rooted to the ground when tagged. The tagged person can unfreeze themselves by calling out a classmate’s name (choosing someone who is within earshot) and paying them a compliment.

Step 3: Group the children into pairs and have them act out the following scenarios with puppets or felt boards. Or alternately, have the children make pipe cleaner figures using two pipe cleaners (Figure 11). The pipe cleaner figures may then be used in acting out the scenarios. If you are using pipe cleaner figures, have the children shape the figures to practice depicting emotions with body language – ask the children how their figures might look if they are sad, excited, scared, or lonely. Responses may include putting the head down and back bent for sad or lonely, and arms raised and jumping up and down to depict excited.

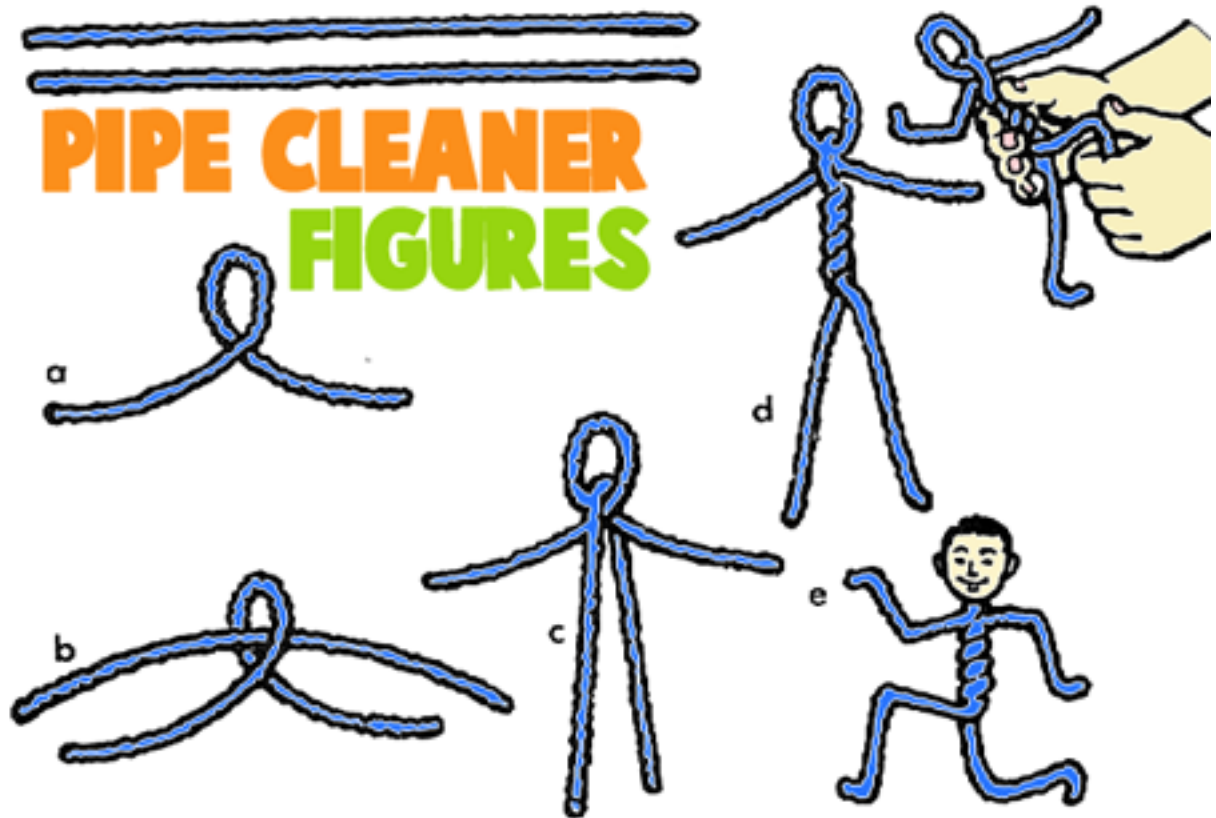


Figure 12. Pipe cleaner figures.

Image from www.artistshelpingchildren.org

Scenarios:

One of you is sitting in the classroom but is looking worried or sad. What can the other person say or do? Should you ignore your friend? Should you just give them a hug? Should you ask how they are feeling? Try out different responses and ask each other which option feels best for you.

One of you is all alone in the playground at recess. What can the other person say or do? Do you go on playing with other friends? Do you go and talk to the person? Do you invite the other person to join in your game? Try different options and see which one feels best to both of you.

You have been on opposite teams for a soccer game. One of you has won and one of you has lost. What can the winner say to the other person? Should he or she say, "Too bad you lost"? Should he or she say, "You played a great game"? Should he or she say, "Your team really stinks"? Try different options to see which lets the winner feel good without making the other person feel bad. Try reversing the roles. Remember you want to stay friends and you want the other person to play with you again another time.

Session 12: Social decision making: Social choices.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Appreciate the value of close friendships
- Think about what respectful relationships involve

Materials

- Jerry's Problem Situation handout

Procedures.

Step 1: Give the class the problem situation handouts, read it aloud and guide the children through the questions. Encourage the students to answer on their own, reminding them that they can change their answers later. Ask the group

- Who can tell us what Jerry's problem is?
- Why is that a problem?
- Do problems like this happen?
- Has anyone had a problem like this?

Keep the discussion brief. Once the group understands the problem situation and accepts it as relevant, transition to the next step.

Step 2: Go through the questions and ask for responses. If a child mentions a responsible choice, invite them to share their reasons for that choice. Before moving to Step 3,

summarize mature reasons by saying something like “we have a number of good reasons, here. For example, the group said (indicate the most mature reasons).

Step 3: Bring into the discussion group members who selected less responsible decisions. Discuss their reasons for making their decisions. Encourage more mature responders to defend their positions.

Step 4: Seek agreement on the responsible course of action for Jerry in each scenario. Encourage growth by affirming the most mature reasons for making the right choices. Ask the class if those reasons should be chosen as the group’s official ‘best’ reasons.

Step 5: Hand out assessment sheets to the children and guide them through each question. Have the children circle the happy face if the action is related to a good decision, or a sad face if the statement reflects a bad decision. For older children, the assessment sheet may be modified by removing the pictures and simply including the words “Good decision” and “Not good decision” for the children to circle. You may use the results of this self-assessment to guide planning for future sessions and provide additional practice if children require additional support for their new skills.

Facilitator Notes.

Steps in the development of judgment in this situation may look as follows:

Stage 1 – “Might makes right”

Jerry should do whatever his parents tell him to do. Adults make the rules.

Stage 2 – “You scratch my back, I’ll scratch yours”

Jerry should stay with Bob because then Bob will choose him next time.

Stage 3 – “Treat others as you would like to be treated”

Jerry should stay with Bob because he would feel bad if Bob left him to go with other friends.

Stage 4 – “It is the right thing to do, we need to respect prior obligations”

Jerry knows that reneging on his agreement is wrong. It is more important to do the right thing than to be popular. Jerry is not a good friend if he leaves Bob, who was the first person at the school to be kind to him.

Discussion of Jerry’s Problem Situation typically promotes a more profound or mature understanding of friendship. Some younger or less mature students may actually become stimulated to construct Stage 3 judgment. For others who already understand and use Stage 3 to some extent, mature reasoning may become more prominent.

Discussion of the value of close friendships seems to promote social cohesion.

Student discussion of Jerry’s Problem Situation typically reaches the heart of the matter with Question 6; often the choice of ‘one close friend’ is unanimous. Reasons for this choice may include the suggestions that ‘you can tell a close friend anything’ and ‘a close friend can be trusted not to take advantage of you’. Especially for this question, Jerry’s Problem Situation permits the cultivation and consolidation of mature morality.

Once a positive peer atmosphere is achieved through discussion of the reasons for the majority position, attention can turn to the dissenting students. The few members advocating that Jerry go with the team tend to be focused on the pursuit of pleasure.

They may say, for example, “Jerry would have more fun with the team.” They may also try to minimize the harm done to Bob: “Bob won’t even notice Jerry didn’t come.”

The main question on which the majority might choose ‘go with the team’ is Question 7, which changes the nature of the relationship between Jerry and Bob from friendship to acquaintance. To a lesser extent, the majority may also choose ‘go with the team’ for Question 5, which has Jerry making the first commitment to the team rather than to Bob. Those students for whom the prior commitment to Bob was the important factor will tend to switch to the ‘team’ response on Question 5.

Jerry's Problem Situation

Jerry was new at his school and he was lonely until one day a boy named Bob came up and introduced himself. "Hi, Jerry. My name is Bob. You're new in our class, would you like to play basketball at recess?" Pretty soon Jerry and Bob were good friends.

Jerry's parents signed him up for hockey on the weekends. Jerry started practicing every week with the team and hanging out with his hockey friends after practice. Because he was spending more time with his hockey friends, he had less time to play with Bob, his old friend. One day he got a call from Bob inviting him to his birthday party on Friday after school. Jerry said he would like to go but he would check with his parents. During practice on Thursday, Jerry's hockey team tells him that they are going to play laser tag after school on Friday.

1. Should Jerry go with the team?

- ☐ Go with the team
- ☐ Go to Bob's party
- ☐ Can't decide

2. What if Jerry thinks his teammates will be upset if Jerry doesn't go with them, what should he do?

- ☐ Go with the team
- ☐ Go to Bob's party
- ☐ Can't decide

3. What if Jerry remembers that Bob really helped him when he was feeling lonely, what should he do?

- ☐ Go with the team
- ☐ Go to Bob's party
- ☐ Can't decide

4. What if Jerry had been invited to play laser tag before Bob invited him to his birthday party, what should he do?

- ☐ Go with the team
- ☐ Go to Bob's party
- ☐ Can't decide

5. Which is more important: to have one close friend or to have a group of regular friends?

- ☐ One close friend
- ☐ Group of regular friends
- ☐ Can't decide

6. What if Jerry and Bob were not good friends but had only met recently, then should Jerry go with the team?

- ☐ Go with the team
- ☐ Go to Bob's party
- ☐ Can't decide

Good Decision/Poor Decision

















Martine gets angry and hits a tree with her fist.	 
Chad gets angry but takes a deep breath and tells his Mom about what he is feeling.	 
Caitlyn looks at her friend's eyes when she is talking.	 
Trevor interrupts his friend when he is talking.	 
Sarah thinks it is OK if her friend takes someone's bicycle because it wasn't being used much.	 
Harib tells an adult when a friend is thinking of doing something dangerous.	 
Betsy does whatever she thinks will be fun even if it hurts someone's feelings.	 
Adam thinks of his friends' feelings and meets them as planned.	 

Figure 13. Good decision/poor decision assessment chart.

Week 5

Session 13: Red light, purple light.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Tominey & McClelland, 2011; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice stopping their movements (inhibition) and managing changing rules (cognitive flexibility)

Materials

- Shapes in different colours (such as a purple circle, orange triangle, green square, etc.). Multiple shapes could have the same colour (e.g. one red square, one red triangle) and one shape may have different colours (e.g. one yellow circle and one blue circle). You will need at least two, and up to six variations.
- A large empty space

Procedures.

Prior to starting: Ask the children if anyone has played the game called Red Light, Green Light. Explain that this game is similar but with changing rules.

Step 1: Start with two of the shapes, one in each hand, and explain the initial rules you will use. Start simply with one colour meaning stop and one meaning go. Stand at one end of the space with the children at the other end. For this round, indicate how the children should move, for example walking, or hopping, or crawling. Decide on your

winning criteria – perhaps the child who makes the fewest mistakes, or the child who reaches you first.

Step 2: For the first few rounds, you should remain the leader to demonstrate how the changing of the rules works. If you wish, you and the children could remember who has ‘won’ the first few rounds and when you begin changing leaders, start with these children. This will have the additional benefit of practicing working memory skills. With each round, change the rules. You could have different colours meaning stop and go, you may have different shapes meaning stop and go, you may have different shapes or colours meaning different ways of moving. If the children have difficulty remembering, limit the changes, if they are ready for more of a challenge add more changes (for example, you may use three or four shapes per round, all with different meanings) or have the shapes or colours be more similar (for example a red square could mean stop and a red circle could mean go). If you let the children become leaders, perhaps allow them to choose the rules for their rounds.

Session 14: Negative assertion.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1984; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Learn that it is important to know when to say ‘no’
- Practice being firm but friendly while saying ‘no’

Materials

- Puppets or stuffed animals (optional)

Procedures.

Facilitator notes

Being able to say ‘no’ gracefully and with meaning is a useful and important skill when making good choices. Sometimes friends will suggest things that the child either does not want to do or things that would result in an unwise decision.

Step 1: Ask the children what they would do if someone wants to do something that they shouldn’t do. Ask if they have ever been invited to do something that they didn’t want to do.

Step 2: Ask the children to find a partner and practice a ‘brave’ posture and facial expression (upright, shoulders back, eye contact). Then have them notice the difference between an angry expression (brows furrowed, frown) and a friendly expression (smiling).

Step 3: Ask the children to try out a ‘brave’ voice while they say “No, thanks”. Point out that this voice should be slightly louder and clearer than their normal, friendly voices, but still have a friendly expression rather than an angry one.

Step 4: Propose that children try to suggest an alternate activity to their friend or sibling. For example, “No, I don’t want to climb on that fence, but how about we play tag?” or “No, I’m not comfortable writing on the wall, but we could colour on this big piece of paper”.

Step 5: Have the children take turns practicing while giving them the following scenarios:

- A friend pressures you to take a classroom toy home with you
- Your little brother or sister wants you to draw a picture on your kitchen wall with markers
- A friend wants you to go outside without telling your parents
- A friend wants you to climb higher than you feel to be safe in the playground

If the children seem to feel anxious about this role play, have them try with puppets or stuffed animals, or with their pipe cleaner figures from session 11.

Step 6: Have a pair of the children demonstrate their new skill for the other children.

Suggest steps to take if the person does not take ‘no’ for an answer and demonstrate.

Steps may include suggesting another alternate activity, changing the facial expression from friendly to stern, raising the vocal volume, use firmer words (such as ‘no way’), walking away, and asking an adult for help.

Session 15: Honesty.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1990; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Think about the importance of honesty and trust
- Practice positive ways of being honest

Materials

- A method of writing ideas down that the children can see and refer to later
(such as a white board or a smart board)

Procedures.

Step 1: Begin by asking children to think of someone whom they trust to tell them the truth, like a parent or teacher or a close friend. Now ask them what would happen if they found out that that person did not tell them the truth about something important – how would they feel? Point out the importance of honesty in a relationship.

Step 2: Describe the following scenario: You borrowed a friend's favourite pencil to finish your drawing. When you were sharpening it, it broke. What should you do? Help the children come to the conclusion that they should let their friend know what happened, and apologize.

Step 3: Describe the following scenario: Monday morning you see your friend and he has had a haircut over the weekend. You think it looks silly. What should you do? The

children may come up with several possible answers. It is important to come to the conclusion that blurting out the truth might be hurtful in this instance. Suggest that if pressed, they may say that it is not their favourite haircut that he has had (to maintain honesty) but they don't need to say anything unless they are asked outright.

Step 4: Help the children develop a list of possible consequences of telling the truth (this may be done as a class, in small groups, or individually). Have some children or groups share some of their examples. Help the children imagine what might happen if they do not tell the truth from the outset – what might happen if a teacher, parent, or friend discovers they have not been truthful. Discuss the fact that if we are honest from the outset, the consequences are usually less severe than if they are found out and they haven't told the truth.

Step 6: Have the children practice being honest and taking ownership in pairs or small groups. You may suggest they use phrases such as, "I'm sorry to tell you that I did it", or "It was an accident, I'm sorry it happened".

Step 7: Present children with one of the scenarios below and ask them to act them out with a partner using their honesty strategies. Alternately, children could draw a comic strip of the conversation or write a song about it.

- You accidentally break one of the classroom toys.
- You hit your brother or sister when you were angry.
- You said something to a friend that was true but it hurt his or her feelings.
- Your teacher keeps giving you work that is too easy and you are bored.

Week 6

Session 16: Drum beats.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; Shanker, 2013; Tominey & McClelland, 2011; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Practice inhibition skills and working memory skills

Materials

- Drum for teacher to use
- Room for movement

Procedures.

Step 1: Demonstrate different beats on the drum changing volume, pace, and way in which you strike the drum. Introduce the ways in which you would like the children to move – either sitting (clapping hands, or stomping, or clapping hands on knees or on the ground) or moving (walking, dancing, crawling, etc.). Initial instructions might include asking the children to walk quickly when the drum beat is fast, walking slowly when the drum beat is slow, and stopping when the drum stops.

Step 2: If children are successful with the initial instructions, make the next step more complex. For example, children could crawl on a slow drum beat and hop on a fast drum beat. If children have trouble with the initial instructions, maintain a slow beat for a period of time until most children are moving in time and then begin to change the beat.

Alternately, if children are having trouble, you may wish to use pictures to demonstrate the kinds of movement you are asking the children to complete.

Step 3: If children continue to be successful, begin to add complexity, for example, ask the children to crawl on a fast drum beat and dance on a slow drum beat, or stop moving when the drum beat is loud and slither when the drum beat is soft.

Session 17: Conflict management.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1984; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Have an introduction to self-talk
- Begin to learn about anger and how to manage it
- Recognize that anger is an emotion and it is normal
- Understand that our behaviour in response to anger is a choice we make
- Appreciate the benefits of a controlled reaction to anger

Materials

- The History of Anger story
- Paper and markers

Procedures.

Step 1: Read The History of Anger story to the class.

Step 2: Discuss the advantages and disadvantages of reacting to anger. Point out that anger can be useful if it is controlled. Help the children understand that strong people (who are truly cool) control their anger. Successful athletes are powerful because they use self-control (ask the children to provide examples of powerful people or athletes they know of who are in control).

Step 3: Ask the children to brainstorm ideas about how we can get our thinking brains to control our reactions when we are angry. Think of slogans or sayings to use (such as “I

can count to ten”, “I can walk away” or “I can take a deep breath from my tummy”) to help them remember to stay in control. Write the slogans on a chart or other board so the children can refer to them. Remind children of their self-regulation strategies for getting back to the calm and alert (green) state learned in session 1.

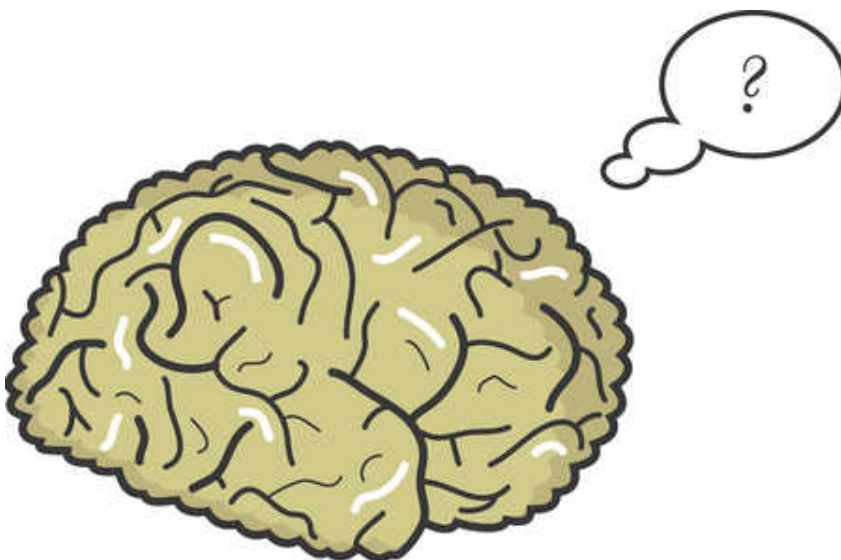
Step 4: Have the children choose a partner and each take a turn trying different slogans in response to pantomimed threats in slow motion (demonstrate this first for younger children).

Step 5: Have children choose a slogan for themselves. Explain that these slogans can be used as self-talk, a way to help them practice their positive thoughts. Provide paper and art supplies to make posters of their slogans.

The History of Anger

A long, long time ago our ancestors had to fight to survive. They did not have a choice. Anger was important to them and it helped them stay alive. If someone stole their food, they had to be ready to defend it. If they were attacked by a wild animal they had to be ready to run away.

Now our bodies still work in the same way if we feel that we are in danger. The responses to anger like the ones we discussed a few weeks ago (such as tightening of fists and angry faces) are our bodies' way of getting us ready. This is called a 'fight or flight' response. One part of your body that gets prepared is your brain. Luckily for us, our brains also have other areas that control our thoughts and our actions. We can recognize our anger and take it to the



thinking parts of our brain and choose how we react.

Figure 14. The history of anger.

Session 18: Decision making.

(Adapted from DiBiase, Gibbs, Potter, & Blount, 2012; Julien, 2013; McGinnis & Goldstein, 1984; Shanker, 2013; Williams & Shelenberger, 1996)

Overview of expectations and activities.

Students will:

- Develop their decision making skills
- Deepen their appreciation for honesty and their respect for property

Materials

- Situation story
- Chart paper or white board or smart board for marking down responses

Procedures.

Step 1: Discuss the steps involved when children are deciding whether to tell an adult about what is happening.

1. Is someone is going to be hurt physically or emotionally?
2. Who should you tell? If there is physical hurt involved, tell an adult immediately. If property or feelings are hurt, perhaps start with the person who is doing the action first. Ask them to rethink their plan or stop what they are doing. If that does not work, then consider telling an adult, ask the adult for help resolving the problem.

Step 2: Introduce the problem situation. Read the story to the children and then ask the children:

- Who can explain Ben's problem?
- Why is that a problem?

- Has anyone had a problem like this?

Keep the discussion brief. Once the group understands the problem situation and accepts it as relevant, transition to the next step.

Step 3: Hand out a problem situation sheet to each child and guide the children through the questions, asking them to make their responses quietly. Tell the children they can change their responses later if they want. Go through the questions and ask for responses. If a child mentions a responsible choice, invite them to share their reasons for that choice. Before moving to Step 3, summarize mature reasons by saying something like “we have a number of good reasons, here. For example, the group said (indicate the most mature reasons).”

Step 4: Bring into the discussion the group members who selected less responsible decisions. Discuss their reasons for making these decisions. Encourage more mature responders to defend their positions.

Step 5: Seek agreement on the responsible course of action for Ben in each scenario. Encourage growth by affirming the most mature reasons for making the right choices. Ask the class if those reasons should be chosen as the group’s official ‘best’ reasons.

Facilitator notes.

Judgment evolves with age and your youngest students may not be too far along in the process. By discussing the reasons for taking the socially responsible or moral course of action, you will help even the youngest of children to become more mature in their thinking.

Steps in the development of judgment in this situation may look as follows:

Stage 1 – “Might makes right”

Ben should choose to tell the teacher or lunch supervisor because we should do what adults say to do. Adults make the rules.

Stage 2 – “You scratch my back, I’ll scratch yours”

Ben doesn’t want to be punished or for Jeff to get into trouble.

Stage 3 – “Treat others as you would like to be treated”

Ben wouldn’t like to have something taken from his desk so he shouldn’t let Jeff take something from the teacher’s desk.

Stage 4 – “It is the right thing to do, we need to respect other’s property”

Ben knows that taking things is wrong. It is more important to do the right thing than to be popular. Jeff is not a good friend if he expects Ben to lie for him.

Ben's Problem Situation

Ben and Jeff are friends in the same grade 3 class. Every day at nutrition break their teacher is out of the classroom and the lunchtime supervisor only checks in every five to ten minutes. Jeff tells Ben that he is going to take something out of the teacher's desk while the lunch supervisor is not in the room. Ben sees Jeff heading towards the teacher's desk and Ben is worried that Jeff is going to do the wrong thing.

Should Ben say something to Jeff before Jeff takes anything?

- ☐ Yes ☐ No ☐ I don't know



Should Ben go and get the lunch supervisor before Jeff does anything?

- ☐ Yes ☐ No ☐ I don't know



Should Ben tell the teacher if Jeff takes something?

- ☐ Yes ☐ No ☐ I don't know



Does it matter if Ben really likes his teacher?

- ☐ Yes, it matters ☐ No, he should do the same thing



If Jeff is taking back his toy that the teacher took away that morning because he was playing in class, should Ben say something to the teacher?

- ☐ Yes ☐ No



What if Jeff takes their teacher's iPod?

- ☐ Ben should tell ☐ Ben shouldn't tell



Figure 15. Ben's problem situation story.

Conclusion

Now you have taken the children through six weeks or eighteen sessions working on executive function skills, social skills, and social decision-making. You will hopefully see improvements in the children's behaviour and skill levels. Feel free to revisit the activities and include new ones you find to continue improving the children's skills. Children's mental health is a topic of growing concern. By continuing to present these topics in an informative and supportive way, children have the opportunity and vocabulary to discuss their feelings.

You may choose to include children's literature during your presentation of this program and in the following weeks in order to continue the children's growth. Some appropriate titles are presented in Table 4.

Table 4

Appropriate Children's Literature Titles by Topic

Topic	Relevant Session(s)	Book(s)
Anger	Session 17	MacLean, K. (2009). <i>Moody cow meditates</i> . Somerville, MA: Wisdom Publications. Silver, G. (2009). <i>Anh's Anger</i> . Berkeley, CA: Plum Blossom Books.
Anxiety	Session 3	Cook, J. (2012). <i>Wilma Jean the worry machine</i> . Chattanooga, TN: National Center for Youth Issues.
Decision Making	Session 15	Stover, J. (1990). <i>They didn't use their heads</i> . Greenville, SC: Journey Forth.
Emotions	Session 2	Freymann, S., & Elffers, J. (1999). <i>How are you peeling? Foods with moods</i> . New York: Scholastic, Inc. Rosenthal, A. (2006). <i>Cookies: Bite-size life lessons</i> . New York: Harper Collins.
Empathy	Session 6	Polacco, P. (1998). <i>Thank you, Mr. Falker</i> . New York: Philomel Books. (Learning Disabilities) Sornson, B. (2013). <i>Stand in my shoes: Kids learning about empathy</i> . Northville, MI: Ferne Press.
Life-changing Events	Session 5 or 6	Watt, M. (2015). <i>Bug in a vacuum</i> . Toronto, ON: Tundra Books.
Mental Illness	Any time	Centre for Addiction and Mental Health. (2009). <i>Can I catch it like a cold? Coping with a parent's depression</i> . Toronto, ON: Tundra Books.
Mindfulness	Any time	Alderfer, L. (2011). <i>Mindful monkey, happy panda</i> . Boston, MA: Wisdom Publications.
Siblings and Sibling Rivalry	Session 15 or 17	Polacco, P. (1994). <i>My rotten redheaded older brother</i> . New York: Aladdin Paperbacks.

Summary

Working on EF skills, social skills, and social decision making provides students with the opportunity to improve their social emotional skills through improved ability, scaffolded social knowledge, and strengthened neural pathways that have been developed through practice. The 18 activities presented in this handbook may be used to provide a foundation of important skills for children in the early elementary years. The handbook includes a variety of active, engaging activities intended to include students with skills and interests in the arts, physical activity, or writing. Activities include options for students at different skill levels, intended to both encourage and challenge students to achieve with help what they might not be able to achieve alone. The following chapter provides an overview of the needs assessment and the handbook, and places both in the context of current literature.

CHAPTER SIX: DISCUSSION

Young students' executive functions (EF) skills and social skills predict a large degree of their future academic success and overall life satisfaction. Many students with challenges in the areas of EF and social skills (including those with learning challenges and medical concerns) will fall farther behind other students who, due to genetic or environmental differences, have started with stronger EF skills. Fortunately, studies have shown that children with lower EF scores respond most strongly to interventions (e.g. Diamond, 2012).

The purpose of this project was to explore the role of EF in developing social-cognitive skills, to investigate the need for a social skills and executive functions support program, and to create a program that simultaneously focused on elementary students' executive functions and social skills with the intention of maximizing students' academic success through their successful social interactions with teachers and peers. Towards this end, a literature review indicated the evidence-based best practices for social skills and EF-focused intervention programs, a needs assessment survey investigated educators' awareness of existing social skills intervention programs, and the development of a handbook provided a resource for educators wishing to support their students' growth in the areas of EF and social skills.

The key findings of the needs assessment survey included that approximately half of surveyed educators were aware of an existing social skills program to which they had access, and more than half had never used one. The majority of educators believed that social skills are important or very important for academic success. Educators identified

emotional intelligence, a good attitude, and patience as the three most important skills for getting along in the classroom. Proven effectiveness, ease of preparation, and a strong theoretical basis were the top three considerations educators identified for choosing a classroom program.

The handbook presented a series of 18 lessons presented in the order of increasing complexity. Six activities were targeted for EF improvement, six for social skills development, and six for social decision making. Lessons included options for making the activities more or less challenging in order to meet the needs of as many children as possible. Activities were also chosen keeping young students' preferences for creativity and physical activity in mind.

Summary of Methods

A survey was designed and posted online in order to capture the opinions of educators regarding the availability and use of social skills programs. A snowball technique was used to allow for the invitation of educators by other educators, thereby reaching as wide a selection as possible of the target population. The target sample of 30 respondents was exceeded, as a total of 44 educators participated in the needs assessment survey. Based on the literature review and the survey responses, a handbook was developed. The handbook includes activities designed to improve EF skills, social skills, and social decision-making. Educators who volunteered to review the handbook had positive comments.

Discussion

Following the summary of the previous chapters presented above, a discussion of the results follows. A closer analysis of the results reveals some interesting possibilities for interpretation. A discussion of how the current manuscript fits in with current trends and developments in research follows.

Analysis of results.

Of the respondents, 51% did not think that they had access to a social skills program to use with their students. This fact suggests that there is a need for social skills programs for elementary school children, and a need for those programs to be sufficiently publicised to ensure that the target audience of elementary school teachers is aware of their existence and also aware of the role social skills may play in the academic development of children.

While over 95% of the respondents indicated that social skills are important or very important for school success, 59% had never used a social skills program in their classroom. This may reflect the fact that more than half of respondents were not aware of being able to access a program and perhaps also reflects that many respondents may not be aware of the existence of programs to support growth in social skills. Perhaps, then, educators feel that social skills will develop in a different way. They may believe that social skills will develop implicitly, that they will develop outside of school, that they will develop without intervention with a specific program, or that the current curriculum provides sufficient opportunities for social skill development, or does not leave sufficient time for additional programming.

Of the respondents who had used a social skills program, 88.9% found it to be effective. This high rate of effectiveness suggests that the majority of social skills programs available in schools have some positive effect as perceived by educators.

Two of the three skills identified by participating educators for getting along with classmates differed from those identified for getting along with teachers. The three most important skills identified for getting along with classmates were emotional intelligence, a good attitude, and flexibility. The skills identified for getting along with teachers were self-control, a good attitude, and self-confidence. It is interesting that different skills were identified for each target group (teachers versus classmates), with a good attitude (defined as being willing to try activities and try to get along with others) as the only skill identified as most important for getting along with both groups. This may be related to the definition, but is also most likely given optimal importance because it is viewed as a key skill in getting along with everybody. The skills identified for getting along with classmates seem to focus on being able to interact in a fashion that involves give and take with peers; emotional intelligence is important for reading others' emotions and needs, a good attitude is important for being willing to use the emotional intelligence, and flexibility is necessary to 'go with the flow', to deal with change, and to perhaps deal with not getting one's own way all the time. The skills identified for getting along with teachers seem to focus more on being able to work independently; self-control involves being able to sit for appropriate periods of time and manage frustrations, a good attitude involves being willing to try activities, and self-confidence involves trying activities without close supervision. The choices indicated by the participants give us an insight into the optimal workings of the classroom from the educators' perspective. It seems that

from the educators' point of view, the students need a rich social atmosphere where interactions are negotiated independently and where the students' interactions with teachers can focus on academics and less on social management.

Results in the context of current literature.

While not all respondents were aware of social skills programs available to them, those who were aware were able to list among them 16 different programs. Programs like Dinosaur Social Skills, STEAM, Tribes, and Second Step were listed by participants. Some respondents were able to name four separate programs of which they were aware. These facts suggest that some educators may be more cognisant overall of the opportunities available to them, some school boards may provide more professional development on the topic of social skills development than others, or awareness of opportunities may reflect differing experience levels and interests of educators.

Although many social skills programs exist, few directly address the improvement of executive functions and take the opportunity to strengthen this underlying mechanism that supports social skills development. For example, while the PATHS program does include mention of EF (www.pathseducation.com), other programs including Roots of Empathy (<http://www.rootsofempathy.org>), and Lion's Quest (www.lions-quest.org) do not. Commercial programs, such as those mentioned above, may require more time commitment than educators indicated that they prefer for a program. They may also, however, provide a complete, prepared program, provide a greater number of activities, and have prior empirical testing to provide evidence of their successful track record.

In the two years since beginning this project, a greater awareness of the role of EF in social-cognitive development and in students' academic success has arisen. An online search revealed more than 1400 journal articles related to the intersection of EF and social skills published between January 2014 and January 2016. Many of these articles focus on specific populations including children with low birth weights, children with autism spectrum disorders, and children with developmental coordination disorder, revealing the wide variety of children that may be affected by issues with their EF. The development of EF is affected not only by these medical concerns but is also strongly influenced by socioeconomic status and stress (Diamond, 2016). These facts suggest that many of the most vulnerable children in society are particularly likely to have challenges developing their EF skills without support. By addressing the need for strong EF skills in early childhood and elementary school, parents, teachers, and other educators can attempt to limit the steep disparity in EF skills that grows as the years pass. Without intervention, children with weak EF skills do not improve their EF as quickly as students with stronger EF skills, resulting in a widening disparity as the years pass (Diamond, 2012). Fortunately, as stated above, research suggests that children with weaker EF skills gain the most from intervention programs (Diamond & Lee, 2011).

The handbook aligns with current research on EF and social skills development. The handbook provides options for mindfulness activities. These activities are showing promise for improving EF in the classroom context (Shapiro, et al., 2015). Zelazo and Lyons (2012) suggest that to support the development self-regulation, programs should address both the top-down processes (such as those involved in EF), and the bottom-up processes that influence self-regulation, such as stress and arousal levels. The handbook

includes lessons for addressing both of these processes by providing opportunities to practice EF skills, reflect on behaviour, monitor arousal levels, and return to a calm, alert state.

Other current issues in the studies of EF include which sub-skills of EF are linked, which skills are of primary importance, and how EF is related to self-regulation (Diamond, 2016). This handbook is not influenced by these debates directly as it addresses many facets of a child's EF skills both directly and indirectly, and it has a particular focus on explicit development of social skills. Ongoing research points to an increased appreciation of the importance of EF skills for happiness and success in later life (Diamond, 2016), once again underlining the crucial nature of interventions to support the development of EF skills in early childhood and elementary school.

Other authors have recently provided an overview of methods to improve EF skills (Bierman & Torres, 2016). Several of the methods identified have been incorporated in the handbook. For example, direct training of EF skills is thought to work through growing the brain circuits that are used in EF. As well, promoting social-emotional learning, as the handbook addresses with social skills and social decision-making activities, is thought to provide children with the emotional awareness and language they need to improve their emotional regulation. Bierman and Torres (2016) also point out that randomized controlled trials are a recent addition to the methodologies used to study the effectiveness of EF interventions. This fact will be addressed in the implications for future research.

Implications for Research

Since the 1980s when Howard Gardner introduced the idea of multiple intelligences (Gardner, 1983) and the 1990s when Daniel Goleman (1995) contributed to making the term ‘emotional intelligence’ part of the common lexicon, the interest of society in social emotional learning has blossomed. With greater awareness and interest came increased research. As a result, our understanding of the importance of social emotional learning, social skills development, and the underlying mechanisms that contribute to these skills (such as EF) has also deepened. It is now widely recognized that early childhood and the early elementary school years are particularly important for developing EF and social skills. By laying the foundation for skills that children will build on throughout their lives, developing EF and social skills in these early years increases the opportunities children have for experiencing academic success. The lessons in the handbook support classroom teachers in their quest to develop these skills in their students.

The next step for this handbook should be a field trial with a small group of students, perhaps with one classroom to begin with. Measurements of academic success from prior years (report cards or EQAO scores), a measure of social skills, and an EF measure may form the baseline data for each student. The classroom educator’s behavioural impressions of the children would also provide useful pre-intervention data. After the program in the handbook has been carried out, a post-survey to gather the educator’s impressions of the handbook itself, and any changes in the children’s behaviour, along with a second measure of the children’s EF and social skills, would provide clues to the usefulness of the program itself. The effects, if any, on the academic

success of the children might not be measureable until a substantial amount of time has passed, as improved social skills and EF may require time to reveal their outcomes on academic skills. Subsequent to a successful pilot trial of the handbook, a larger randomized, controlled trial would confirm the effectiveness of this approach while providing more scientific rigour.

In future, researchers may wish to replicate the survey to address additional questions including collecting demographics of respondents, learning about educators' awareness of EF, and additional collecting opinions from a wider group of respondents. Future research may investigate the reasons for educators' lack of awareness of social skills programs; determining what programs are available in each school board and how educators are provided with information about these programs would also support future efforts to make use of the available resources. Researchers may also be interested in the opportunity to address EF improvements in the context of social emotional learning. Additional research on the universality of the perceived importance of particular social skills could investigate whether educators from different cultures rate different skills more highly. Finally, as educators recognize the importance of the contribution of their own EF and social skills to the social well-being of the classroom, future research may lead to the creation a teacher self-evaluation tool to support awareness of each educator's own areas of need for social-emotional or EF growth.

Implications for Practice

Research for this handbook revealed several straightforward practices that classroom teachers could implement to support their students' development of EF skills.

Teachers may benefit from learning about EF in the context of social emotional learning as this is a component fairly unique to this handbook. Teachers may also benefit from the handbook itself, as it provides many engaging classroom activities ready to be implemented without a great deal of additional preparation. Teachers will also benefit from an improved, positive classroom atmosphere as their students improve their EF and social skills. If the activities in the handbook are effective, students will benefit from increased EF and social skills.

Researchers and school boards may learn from the needs assessment as they discover the need for dissemination of information about the availability of social skills programs, educators' preferences regarding program attributes, and which social skills educators believe to be important for classroom success. Communities where EF and social skills programs are introduced will benefit from young people who have an improved chance for academic and social success, an improvement which may result in greater economic opportunities and lower incarceration rates.

Given the importance of modelling for social skill development, and its possible contribution to EF development, teacher self-evaluation and training would be valuable additions in the future. When the adults around a child are able to demonstrate appropriate self-regulation and social interactions, children are able to learn implicitly as well as explicitly from a social skills and EF intervention. To this end, parent programs of self-evaluation and training to support their social skills and EF skills would contribute to a circle of care where modelling and messages provided to the children are aligned for the most thorough impact. Additional training for teachers, specifically concerning the

administration and delivery of social skills and EF programs, would also be likely to maximize the impact of intervention programs.

Social skills, positive relationships, and self-regulation are all identified as important to student development in the Full-Day Early Learning Kindergarten Program (Ontario Ministry of Education, 2010) and in the Health and Physical Education curriculum for grades 1 – 8 (Ontario Ministry of Education, 2015). This handbook may be used to supplement the curriculum in these areas.

Conclusion

Ongoing research continues to confirm the importance of EF and social skills for children's futures, both academic and non-academic. By raising awareness of the importance of these skills, and providing a potential method their improvement, this handbook attempts to contribute to the success of the children who might otherwise not reach their full potential due to their challenges with EF and social awareness. Ideally, readers will retain a cognisance of both the importance of EF and the many methods available for improving these crucial skills.

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